

Aurora Mental Health Center Traffic Impact Study



Date: June 6, 2022

Submitted To:

Aurora Mental Health Center
1290 Chambers Road
Aurora, CO 80011

Submitted By:

Fox Tuttle Transportation Group, LLC
1624 Market Street, Suite 202
Denver, CO 80202

TABLE OF CONTENTS

1.0	Introduction	1
2.0	Project Description	2
3.0	Study Considerations	2
3.1	Data Collection.....	2
3.2	Evaluation Methodology	2
3.3	Level of Service Capacity Analysis	3
4.0	Existing Conditions	3
4.1	Roadways.....	3
4.2	Intersections	5
4.3	Pedestrian and Bicycle.....	5
4.4	Transit	5
4.5	Year 2021 Existing Intersection Capacity Analysis.....	6
5.0	Future Conditions	8
5.1	Annual Growth Factor and Future Volume Methodology.....	8
5.2	Year 2025 Background Intersection Capacity Analysis	8
5.3	Year 2040 Background Intersection Capacity Analysis.....	9
6.0	Future Conditions with the Development	10
6.1	Trip Generation.....	10
6.2	Trip Distribution and Assignment	11
6.3	Proposed Access	12
6.4	Future Multi-Modal Facilities	12
6.5	Year 2025 Background + Project Intersection Capacity Analysis.....	12
6.6	Year 2040 Background + Project Intersection Capacity Analysis.....	13
7.0	Queuing Analysis	14
8.0	Conclusions	15

LIST OF TABLES

Table 1 – Peak Hour Intersection LOS Summary	18
Table 2 – Peak Hour Estimated Queues and Proposed Auxiliary Lanes	19
Table 3 – Trip Generation Summary	20

LIST OF FIGURES

Figure 1 – Vicinity Map	21
Figure 2 – Conceptual Site Plan	22
Figure 3 – Existing Traffic Volumes	23
Figure 4 – Year 2025 Background Traffic Volumes	24
Figure 5 – Year 2040 Background Traffic Volumes	25
Figure 6 – Site Trip Distribution	26
Figure 7 – Site-Generated Trip Volumes.....	27
Figure 8 – Year 2025 Background + Site-Generated Traffic Volumes.....	28
Figure 9 – Year 2040 Background + Site-Generated Traffic Volumes.....	29

APPENDIX

Level of Service Definitions

Existing Traffic Data

Intersection Capacity Worksheets

AURORA (POTOMAC) MENTAL HEALTH CENTER TRAFFIC IMPACT STUDY

1.0 Introduction

The Fox Tuttle Transportation Group has prepared this traffic impact study for the development of the Aurora Mental Health Center project. The property is located in the City of Aurora in the southeast corner of Potomac Street and Louisiana Avenue. Currently, there is one building on the property that has been utilized by various commercial businesses or medical services for the past few decades. The site has a single access point on Potomac Street and the property is surrounded by commercial and medical land uses to the north, south and west. Interstate 225 (I-225) travels along the east boundary of the project property. It is understood that the project will include three (3) new buildings to serve as the Aurora Mental Health Center with housing and medical services. **Figure 1** provides a vicinity map for the proposed project.

The purpose of this study is to assist in identifying potential traffic impacts within the study area as a result of this project. The traffic study addresses existing, short-term, and long-term peak hour intersection conditions in the study area with and without the project-generated traffic. The information contained in this study is anticipated to be used by the City of Aurora staff in identifying any intersection or roadway deficiencies and potential improvements for the build-out condition of the project and long-term future scenarios. This study focused on the weekday AM and PM peak hours which represents the periods of highest trip generation for the proposed use and adjacent street traffic. The study is consistent with the requirements of the City of Aurora's *Traffic Impact Study Guidelines* (June 2015). The following supporting documents were reviewed and incorporated into this analysis as appropriate:

- *Aurora Places; Planning Tomorrow's City*. The Comprehensive Plan for the City of Aurora. October 2018.
- *Maverik Store, Potomac Street and Mississippi Avenue Traffic Impact Evaluation*. Felsburg Holt Ullevig. August 2016.

2.0 Project Description

The Aurora Mental Health Center project on Potomac Street plans to redevelop the subject site to include three (3) buildings, including a 30,000 square foot medical clinic, a 50,000 square foot behavioral health center, and a 40-unit affordable apartment complex. The project proposes to continue to utilize the existing driveway on Potomac Street with full movement access and side-street stop-control. This intersection is approximately 150 feet south of the intersection with Louisiana Avenue. The site plan includes circulation around the outside of the property to provide front door access to the three (3) proposed buildings and the associated parking lots. Refer to the parking study that is a separate letter from this traffic study for calculations on parking demand and anticipated shared parking. For the purpose of this traffic study, it was assumed that the Aurora Mental Health Center project will be completed by Year 2025. **Figure 2** shows the site plan, access location, and circulation.

3.0 Study Considerations

3.1 Data Collection

Intersection turning movement volumes were collected in April 2022 at five (5) existing intersections during the weekday AM and PM peak hours, including pedestrians and bicyclists. Daily traffic volumes were also collected on Potomac Street north of and south of the existing access to the project site. Existing and historic traffic volumes on the study roadways were gathered from nearby development traffic studies, Colorado Department of Transportation's (CDOT) Transportation Data Management System (TDMS) and CDOT's Online Transportation Information System (OTIS). The existing traffic volumes are illustrated on **Figure 3**. The existing intersection geometry and traffic control are also shown on this figure. Count data sheets are provided in the **Appendix**.

3.2 Evaluation Methodology

The traffic operations analysis addressed the signalized and unsignalized intersection operations using the procedures and methodologies set forth by the Highway Capacity Manual (HCM)¹. Existing peak hour factors (PHF) by approach and peak hour were applied to the study intersections for the existing and

¹ Highway Capacity Manual, Highway Research Board Special Report 209, Transportation Research Board, National Research Council, 6th Edition (2016).

short-term future scenarios. For long-term future scenarios, the PHF were set to 0.92 in the future unless the existing PHF was greater than this value. Study intersections were evaluated using Synchro software (v11).

3.3 Level of Service Capacity Analysis

A Level of Service analysis was conducted to determine the existing and future performance of the study area intersections and accesses to determine the most appropriate intersection traffic controls and auxiliary lanes for future conditions.

To measure and describe the operational status of the study intersections, transportation engineers and planners commonly use a grading system referred to as “Level of Service” (LOS) that is defined by the *HCM*. LOS characterizes the operational conditions of an intersections traffic flow, ranging from LOS A (indicating very good, free flow operations) and LOS F (indicating congested and sometimes oversaturated conditions). These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with traveling through the intersections. The intersection LOS is represented as a delay in seconds per vehicle for the intersection as a whole and for each turning movement.

Typically, LOS A through C is considered to be acceptable for the overall intersection operations and LOS D overall during peak hours is acceptable. Individual movements may be allowed to fall to LOS E at signalized intersections. Minor movements at unsignalized intersections, such as left turns onto a major arterial, may be allowed to fall below LOS D, specifically where there are low volumes and/or no viable alternative per the City of Aurora’s Traffic Impact Study Guidelines. Criteria contained in the *HCM* was applied for these analyses in order to determine peak hour LOS for each scenario. A more detailed discussion of LOS methodology is contained in the **Appendix** for reference.

4.0 Existing Conditions

4.1 Roadways

The study area boundaries are based on the amount of traffic to be generated by the project and potential impact to the existing roadway network. The primary public roadways that serve the project site are discussed in the following text and illustrated on **Figure 1**.

Interstate 225 (I-225) is a six-lane divided highway that travels through the center of Aurora, connecting three counties and linking Aurora to Denver. The interstate currently extends 12± miles from I-25 (southwest of project) to I-70 (north of the project). I-225 has a full-movement interchange at Mississippi Avenue. The posted speed limit on I-225 within the study area is 55 miles per hour (mph) and this roadway serves approximately 160,000 vehicles per day (vpd) north of the interchange with Mississippi Avenue (CDOT, Year 2021).

Mississippi Avenue is a six-lane, east-west, major arterial that stretches from Parker Road (west) to Tower Road (east) where it becomes Dunkirk Street and becomes north-south. Mississippi Avenue provides access to several neighborhoods, commercial centers, medical services, recreational areas, schools, and office buildings. This roadway has a posted speed limit of 40 mph within the vicinity of the study area. Mississippi Avenue serves approximately 49,600 vpd east of Potomac Street (CDOT, Year 2021).

Potomac Street is a north-south minor arterial that parallels I-225 and extends between Jewell Avenue (south) to Colfax Avenue (north) where it becomes Fitzsimons Parkway. This roadway provides local access to the Anschutz Medical Campus, neighborhoods, recreational facilities, commercial centers, a school, and The Medical Center of Aurora. Potomac Street changes from a four-lane roadway with a center turn lane north of Alameda Avenue and then becomes a two-lane roadway to Mississippi Avenue. South of Mississippi Avenue, Potomac Street remains a two-lane roadway with the addition of a center turn lane and a two-way cycletrack along the east side of the street. Within the study area, Potomac Street has a posted speed limit of 30 mph and serves approximately 19,640 vpd south of Mississippi Avenue (count data, Year 2022) and approximately 13,670 vpd south of Louisiana Avenue (count data, Year 2022).

Louisiana Avenue is an east-west roadway that travels between Moline Street and Potomac Street, providing access to residential neighborhoods and The Medical Center of Aurora campus. Currently, Louisiana Avenue is a two-lane roadway with a posted speed limit of 25 mph. This roadway serves approximately 2,000 vpd west of Potomac Street (estimated from counts, Year 2022).

Wheeling Way is a local roadway that provides access to residential neighborhoods. Currently, this two-lane roadway has a posted speed limit of 25 mph and serves approximately 1,000 vpd north of Louisiana Avenue (estimated from counts, Year 2022).

4.2 Intersections

The study area includes five (5) existing intersections that are listed below with the current traffic control and were analyzed for existing and future background year traffic operations:

1. Mississippi Avenue at Potomac Street [signalized]
2. Potomac Street at Louisiana Avenue / Commercial Truck Access [signalized]
3. Potomac Street at Existing Access [stop-controlled]
4. Potomac Street at Arkansas Drive [stop-controlled]
5. Louisiana Avenue at Wheeling Way [stop-controlled]

The existing lane configuration at each of the study locations is illustrated on **Figure 3**. Signal timing plans were provided by the City of Aurora and utilized in this traffic study.

4.3 Pedestrian and Bicycle

Currently, there are sidewalks on both sides of all the roadways within and near the study area. Within approximately two (2) miles of the project property, there are several regional trails that transverse through the City of Aurora and provides local and regional connections to neighborhoods, civic centers, commercial developments, employment centers, and transit services. North of Alameda Parkway, people can access the Highline Canal Trail, a 71-mile regional multi-use path that extends from Jefferson County to the west and the Aurora/Denver boundary to the north. Approximately one (1) mile to the southwest of the project is the Westerly Creek Trail that travels north-south between the Highline Canal Trail and Yale Avenue with access to several parks and neighborhoods. Just over two (2) miles to the east on Mississippi Avenue is the Toll Gate Creek Trail that follows the creek to link to other trails, bikeways, and the Cherry Creek Trail. These regional trails lead to Quincy Reservoir, Cherry Creek State Park, the High Plains Trail along E-470, and numerous local pedestrian and bicyclist facilities.

Potomac Street provides a two-way, protected cycletrack along the east side of the roadway between Louisiana Avenue and Jewell Avenue where it links to the Westerly Creek Trail. Louisiana Avenue permits people cycling to ride with traffic. Wheeling Way provides directional on-street bike lanes south of Louisiana Avenue and shared lanes north of Louisiana Avenue.

4.4 Transit

The City of Aurora is serviced by Regional Transportation District (RTD). Currently, there are bus stops along Potomac Street and Wheeling Way. There is also light rail transit service along the east side of I-225

with the nearest station located at Florida Avenue and Abilene Street (named Florida Station). This station can be accessed via a pedestrian walkway and pedestrian bridge over the interstate that is located on Potomac Street just south of Arkansas Drive. The following routes provide transit serve within and near the study area:

- **H-Line:** this light rail route travels 18± miles from the Florida Station in Aurora (near the project site) to Downtown Denver. The rail tracks follow the alignment of I-225 to I-25 to Colfax Avenue into Downtown Denver and back.
- **R-Line:** this light rail route travels 22± miles from the RidgeGate Parkway Station in Lone Tree, through Aurora, to I-70 at the Peoria Station. The R-Line provides service at the Florida Station. The rail tracks follow the alignment of I-25 and I-225. People that utilize this light rail service can commute into the Denver Tech Center, downtown Denver, the Fitzsimons Medical Campus, and the Denver International Airport.
- **Route 11 (Mississippi Avenue):** this bus route travels along Mississippi Avenue between Lakewood Commons, the I-25 Broadway Station, the Florida Station, and the Aurora Metro Center Station. Within the study area, this bus route travels along Wheeling Way, Arkansas Drive and Potomac Street. Near the project property, there are bus stops on Potomac Street just north of Louisiana Avenue (east side), on Potomac Street north of Arkansas Drive (both sides), and on Wheeling Way at Louisiana Avenue (far sides of the intersection).

People that utilize these transit services can transfer to several other transit services to reach their desire destination locally or regionally within the Front Range communities.

4.5 Year 2021 Existing Intersection Capacity Analysis

The existing volumes, lane configuration, and traffic control are illustrated on **Figure 3**. The details of LOS for each movement are provided in **Table 1** and the 95th percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**. **All of the study intersections currently operate overall at LOS C or better.** The following study intersections currently have movements that operate at LOS E/F during the one or both peak hours:

- **#1 – Mississippi Avenue at Potomac Street:** This signalized intersection currently operates overall at LOS C in both peak hours. During both peak hours, the eastbound left-turn lane was estimated to operate at LOS E and the 95th percentile queues for this movement were calculated to be up to

70 feet (three vehicles or less). During the AM peak hour, the northbound through movement was estimated to operate at LOS E with the 95th percentile queue calculated to be 102 feet (about four vehicles). During the PM peak hour, the westbound left-turn and southbound right-turn movements were estimated to operate at LOS E with the 95th percentile queue for the westbound left-turn calculated to be 169 feet (about seven vehicles) and one vehicle or less for the southbound right-turn. Although the southbound left-turn movement was estimated to operate at LOS D in both peak hours, it should be noted that the 95th percentile queue for this movement was calculated to extend beyond the existing storage by approximately 100-150 feet depending on the peak hour.

Recommendations: Consider lengthening the southbound left-turn storage from 50 feet to 135 feet to minimize impacts to the adjacent lanes. It appears this could be achieved by updating the pavement markings (further investigation is needed to verify). Note the calculated queue will continue to be longer than the available storage length since the upstream intersection is only 140 feet away from the stop bar at Mississippi Avenue.

No mitigation measures are recommended for the other movements with LOS E since the delays are reasonable for the left-turns and side-street movements during peak periods and less than one signal cycle length. The queues are maintained within the existing storage lengths.

- **#2 – Potomac Street at Louisiana Avenue:** This signalized intersection currently operates overall at LOS B in both peak hours. The eastbound left-turn/through lane and the westbound approach were estimated to operate at LOS E in the AM peak hour. During the PM peak hour, the eastbound left-turn/through lane was estimated to operate at LOS E. The 95th percentile queue for the eastbound left-turn/through lane was calculated to extend up to 251 feet (about 10 vehicles) which is beyond the existing storage length. The 95th percentile queue for the westbound approach lane was calculated to extend up to 12 feet (one vehicle or less).

Recommendations: Consider lengthening the eastbound left-turn/through storage from 60 feet to 275 feet to manage the queue and to minimize any impacts to the bike lane and right-turn lane. It appears this could be achieved by updating the striping (further investigation is needed to verify).

5.0 Future Conditions

5.1 Annual Growth Factor and Future Volume Methodology

In order to forecast the future peak hour traffic volumes, the historic count data from CDOT and the future forecasts from DRCOG were reviewed, compared, and utilized. The data indicated that growth on Mississippi Avenue has been 1% annually and is anticipated to remain the same in the future. The data on Potomac Street indicated there is likely to be an annual growth rate of 0.5% since the properties along Potomac Street are buildout and significant redevelopment would have to occur for a greater growth in traffic. For the purpose of this traffic study, an annual growth rate of 1.0% was applied to the existing through volumes on Mississippi Avenue and an annual growth rate of 0.5% was applied to the existing traffic volumes along Potomac Street, Louisiana Avenue, and Wheeling Way. The Year 2025 background volumes are summarized on **Figure 4** and the Year 2040 background volumes are summarized on **Figure 5**.

5.2 Year 2025 Background Intersection Capacity Analysis

The study area intersections were evaluated to determine baseline operations for the Year 2025 background scenario and to identify any capacity constraints associated with background traffic (refer to **Section 5.1** for growth assumptions). The background volumes, lane configuration, and traffic control are illustrated on **Figure 4**.

The Level of Service criteria discussed previously was applied to the study area intersections to determine the impacts with the short-term background volumes. This analysis assumes existing signal timing remains, although it is likely that the signal timing will be adjusted as traffic growths and/or travel patterns adjust. The details of LOS for each movement are provided in **Table 1** and the 95th percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

In summary, all of the study intersections were estimated to operate overall at LOS C or better in the 2025 background condition during both peak hours with majority of the movements operating at LOS D or better. The same movements that were calculated to operate at LOS E in the existing condition were projected to continue to operate at the same letter grade in the short-term future condition and not degrade to LOS F. Some of the 95th percentile queues increased by two vehicles or less with the additional background traffic growth. No additional mitigation measures are recommended from those listed in the existing scenario.

5.3 Year 2040 Background Intersection Capacity Analysis

The study area intersections were evaluated to determine baseline operations for the Year 2040 background scenario and to identify any capacity constraints associated with background traffic in the long-term scenario (refer to **Section 5.1** for growth assumptions). The long-term background volumes, lane configuration, and traffic control are illustrated on **Figure 5**.

The Level of Service criteria discussed previously was applied to the study area intersections to determine the impacts with the long-term background volumes. This analysis assumes existing signal timing remains, although it is likely that the signal timing will be adjusted as traffic growths and/or travel patterns adjust. It should be noted that the peak hour factors were adjusted to 0.92 (if the existing factor is less than 0.92) on the arterials since it is assumed that the peak periods will become longer with peak hour traffic spread more evenly over the hour as traffic increases than is experienced today.

The details of LOS for each movement are provided in **Table 1** and the 95th percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

In summary, all of the study intersections were estimated to operate overall at LOS C or better in the 2040 background condition during both peak hours with the majority of movements operating at LOS D or better. The following movements were calculated to begin to operate at LOS E/F in one or both peak hours in Year 2040 background as described below:

- **#1 – Mississippi Avenue at Potomac Street:** This signalized intersection is estimated to continue to operate overall at LOS C in both peak hours. During the PM peak hour, the northbound left-turn lane was estimated to begin to operate at LOS E and the 95th percentile queues were calculated to be up to 117 feet (five vehicles or less). The following movements will continue to operate at LOS E as presented in the existing and short-term scenarios: eastbound left-turn and westbound left-turn. The 95th percentile queue of the eastbound left-turn movement was calculated to be maintained in the existing storage length. The 95th percentile queue for the westbound left-turn was calculated to extend to 411 feet, which is 11 feet beyond the existing storage length. Although the southbound left-turn movement was estimated to operate at LOS D in both peak hours, it should be noted that the 95th percentile queue for this movement was calculated to extend beyond the existing storage by approximately 120-155 feet.

Recommendations: No additional mitigation measures are recommended from the existing scenario. The delays are reasonable for the left-turns and side-street movements during peak

periods and less than one signal cycle length. The majority of the queues are maintained within the existing storage lengths. The westbound left-turn storage cannot easily be extended since it is limited by a back-to-back left-turn with the adjacent intersection which is the I-225 interchange.

6.0 Future Conditions with the Development

The proposed Aurora Mental Health Center is anticipated to include a medical clinic, behavioral health center, and affordable housing. For the purpose of this traffic study, it was assumed that the entire project will be complete in three (3) years.

6.1 Trip Generation

A trip generation estimate was performed to determine the traffic characteristics of the proposed redevelopment. The trip rates contained in the Institute of Transportation Engineers (ITE) Trip Generation Handbook and Manual² were applied to estimate the project traffic. The trip rates for #610 “Hospital”, #223 “Affordable Housing – Income Limits”; and #630 “Clinic” were applied to the proposed square footage or number of units.

The trip data for “Affordable Housing” is new to the ITE Trip Generation Handbook with only five (5) studies included. The definition of this land use type is:

“Affordable housing includes all multifamily housing that is rented at below market rate to households that include at least one employed member. Eligibility to live in affordable housing can be a function of limited household income and resident age. Data are presented for three subcategories for this land use: (1) sites with income limitations for its tenants (denoted as income limits in the data plots), (2) sites with both minimum age thresholds and income limitations for its tenants (denoted as senior in the data plots), and (3) sites designed for and occupied by residents with special needs, such as persons with physical and mental impairments, single mothers, recovering addicts and others living in a group setting.”

For conservative purposes of this traffic study, the subcategory of “income limits” was utilized although the housing is anticipated to be utilized by individuals that have special support needs from the medical services to be provided at the Aurora Mental Health Center. Based on the limited data available in the ITE

² Trip Generation Handbook and Manual, 10th Edition, Institute of Transportation Engineers, 2017.

Trip Generation Handbook for affordable housing, the “special needs” category was calculated to be approximately 55% of the “income limits” daily trip rates and approximately 40% during the peak hours.

It should be noted that there is not a specific rate in ITE for facilities that focus on behavioral health and local data is not available. Based on typical staffing of these facilities, it is anticipated the trips estimated with the “Hospital” trip rates are conservative and will most likely be between 50-75% of the trip volume estimated by land use “Hospital”.

Table 3 provides the detailed trip generation estimates for the Aurora Mental Health Center project (refer to the **Appendix**). The proposed project is expected to experience mostly new trips, also known as ‘primary trips,’ as well as non-auto trips which are discussed below:

Primary Trips. These trips are made specifically to visit the site and are considered “new” trips. Primary trips would not have been made if the proposed project did not exist. Therefore, this is the only trip type that increases the total number of trips made on a regional basis.

Non-Auto Trips. These trips are those that are completed by carpool, walking, biking, or transit. The non-auto trips were assumed to be 5% which includes any trips that remain internal to the site between the three (3) buildings.

The Aurora Mental Health Center project was estimated to generate approximately 1,767 daily trips with 131 trips in the AM peak hour and 163 trips in the PM peak hour. It is anticipated that the trip estimate is conservative since the affordable housing component utilized the higher trip rate for “income limits” and not “special needs.” Also, the use of hospital trip rates for the behavioral health facilities is likely double the anticipated trips based on programming and staffing of similar facilities.

6.2 Trip Distribution and Assignment

The estimated trip volumes were distributed onto the study area street network based on existing traffic characteristics, land uses, and traffic patterns in the area, as well as regional growth and future traffic patterns. The existing volumes were utilized to determine where vehicles are coming from and going to within the study area, plus the routes to get to major highways and anticipated destinations were taken into consideration. The following distributions were assumed for this project and are shown on **Figure 6**:

- North Potomac Street: 5%
- South Potomac Street: 35%
- West Mississippi Avenue: 20%
- East Mississippi Avenue: 30%
- South Louisiana Avenue: 5%
- West Wheeling Way: 5%

Using the distribution assumptions, the projected site traffic was assigned to the study area roadway network for the weekday AM and PM peak hour periods and shown on **Figure 7**.

6.3 Proposed Access

The Aurora Mental Health Center site plans to continue to utilize the existing access on Potomac Street which is approximately 150 feet south of Louisiana Avenue. This access will continue to include one inbound lane and one outbound lane with side-street stop-control; however, it is proposed that the width of the access be reduced, and the existing raised median be removed.

Potomac Street includes a center left-turn lane that will accommodate any southbound left-turns into the site. The existing access intersection and lane configuration is illustrated on **Figure 7**. Internally, there will be one circulating street that will be constructed to provide the most beneficial access around the site with accommodations for pedestrian and bicycle friendly amenities.

6.4 Future Multi-Modal Facilities

The Aurora Mental Health Center project proposes to have sidewalks along the edges of the property and between the buildings and parking lots to connect internally and externally. Potomac Street provides connected sidewalks, a two-way cycletrack along the east site, and high frequency transit services. The reconstruction of the existing driveway will include a marked crosswalk and specific signage to bring awareness of crossing pedestrians and the two-way bicycle traffic on Potomac Street.

6.5 Year 2025 Background + Project Intersection Capacity Analysis

This section discusses impacts associated with the addition of the Aurora Mental Health Center redevelopment trips in the short-term scenario. The site-generated volumes were added to the Year 2025 background volumes and are illustrated on **Figure 8**. This figure also illustrates the necessary traffic control and lane configurations for all of the study intersections and the proposed access.

The study intersections are anticipated to operate similarly to the short-term background condition with the addition of project trips and all of the overall intersection levels of service remained the same letter grade. The details of LOS for each movement are provided in **Table 1** and the 95th percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

The following intersections are anticipated to have one movement that begins to operate below LOS D with the additional project trips:

- **#1 – Mississippi Avenue at Potomac Street:** This signalized intersection will continue to operate overall at LOS C in both peak hours. During the AM peak hour, the northbound left-turn was estimated to begin to operate at LOS E (increase of about 15 seconds) due to increased turning traffic and limited green time. The 95th percentile queue for this movement was calculated to increase by 90 feet (about four vehicles) during the morning peak but be maintained within the existing storage length.

Recommendations: Adjust the signal timing, as necessary. A high-level review indicated that the northbound left-turn could operate at LOS D, similar to the short-term background scenario, if five (5) additional seconds in green time were provided to the protected left-turn phase.

- **#2 – Potomac Street at Louisiana Avenue:** This signalized intersection will continue to operate overall at LOS B in both peak hours. During the AM peak hour, the eastbound right-turn was estimated to begin to operate at LOS E (increase of less than one second). The 95th percentile queue for this movement was calculated to remain the same as existing (one vehicle or less).

Recommendations: No mitigation measures recommended. The delay and queue of the eastbound right-turn are reasonable for the side-street approach with a split phased signal.

The existing access was calculated to operate overall at LOS A during both peak hours and the westbound approach estimated to operate at LOS B in the AM peak hour and LOS C in the PM peak hour. The 95th percentile queue on the project driveway was calculated to be up to 40 feet (about two vehicles) that will be maintained on-site.

6.6 Year 2040 Background + Project Intersection Capacity Analysis

This section discusses impacts associated with the addition of the Aurora Mental Health Center redevelopment trips in the long-term scenario. The site-generated volumes were added to the Year 2040 background volumes and are illustrated on **Figure 9**. This figure also illustrates the necessary traffic control and lane configurations for all of the study intersections and the proposed access.

The study intersections are anticipated to operate similarly to the long-term background condition with the addition of project trips and all of the overall intersection levels of service remained the same letter

grade. The details of LOS for each movement are provided in **Table 1** and the 95th percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**. The following intersections are anticipated to have one movement that begins to operate below LOS D with the additional project trips:

- **#1 – Mississippi Avenue at Potomac Street:** This signalized intersection will continue to operate overall at LOS C in both peak hours. During the PM peak hour, the southbound through movement was estimated to begin to operate at LOS E (increase of about three seconds) due to increased traffic through the intersection and limited green time. The 95th percentile queue for this movement was calculated to increase by eight (8) feet (one vehicle or less).

Recommendations: Adjust the signal timing, as necessary. A high-level review indicated that the southbound through could operate at LOS D, similar to the long-term background scenario, if two (2) additional seconds in green time were provided.

- **#2 – Potomac Street at Louisiana Avenue:** This signalized intersection will continue to operate overall at LOS B in both peak hours. During the AM peak hour, the eastbound right-turn was estimated to begin to operate at LOS E (increase of less than one second). The 95th percentile queue for this movement was calculated to remain the same as existing (one vehicle or less).

Recommendations: No mitigation measures recommended. The delay and queue of the eastbound right-turn are reasonable for the side-street approach with a split phased signal.

The existing access was calculated to operate overall at LOS A during both peak hours and the westbound approach estimated to operate at LOS C in both peak hours. The 95th percentile queue on the project driveway was calculated to be up to 40 feet (about two vehicles) that will be maintained on-site.

7.0 Queuing Analysis

A queuing analysis was performed to determine if the 95th percentile queues would be accommodated by the existing storage length, to determine the storage lengths for future auxiliary lanes, and if any of the queues would impact an upstream intersection/access. **Table 2** provides the existing and proposed storage lengths, as well as the 95th percentile queues for each existing and future scenario as calculated by Synchro (assuming each vehicle utilizes 25 feet of space). It should be noted that the 95th percentile

queue length is a theoretical queue that is 1.65 standard deviations above the average queue length. In theory, the 95th percentile queue would be exceeded 5% of the time based on the average queue length, but it is also possible that a queue this long may not occur.

As shown in **Table 2**, majority of the queues are shorter than the provided storage length in all scenarios. The movements that have queues extending beyond the existing storage length are listed below and highlighted in blue in **Table 2**:

- **Mississippi Avenue at Potomac Street:** Westbound left-turn by approximately 29 feet and southbound left-turn by approximately 156 feet. The westbound left-turn cannot easily be extended since it is limited by the back-to-back left-turn lanes associated with the I-225 interchange intersection. Consider restriping the southbound left-turn storage to provide 135 feet of storage.
- **Potomac Street at Louisiana Avenue:** Eastbound left-turn/through by approximately 212 feet. Consider restriping the eastbound approach to extend the storage length from 60 feet to 275 feet.

The project trips do not significantly increase queues at the existing study intersections. The study intersections that are at or near capacity will experience longer queues with any additional traffic. The queues between the proposed access intersections were evaluated to determine if queued vehicles would impact an upstream intersection. It was determined that the proposed access will not have queues that extend into adjacent intersections.

Recommended turn lanes storage lengths and taper lengths are also listed in **Table 2**, which are based on the CDOT State Highway Access Code for the assumed posted speed of each study roadway. Classification of NR-B was utilized on the arterial roadways.

8.0 Conclusions

The Aurora Mental Health Center project on Potomac Street plans to redevelop the subject site to construct three (3) buildings, including a 30,000 square foot medical clinic, a 50,000 square foot behavioral health center, and a 40-unit affordable apartment complex. The project proposes to continue to utilize the existing driveway on Potomac Street with full movement access and side-street stop-control. This intersection is approximately 150 feet south of the intersection with Louisiana Avenue. The site plan

includes vehicular and multi-modal circulation around the property to connect to the three (3) proposed buildings, amenities, and parking lots. Refer to the parking study that is a separate letter from this traffic study for calculations on parking demand and anticipated shared parking. For the purpose of this traffic study, it was assumed that the Aurora Mental Health Center project will be completed by Year 2025.

Aurora Mental Health Center is estimated to generate approximately 1,767 daily trips with about 131 trips occurring in the AM peak hour and 163 trips occurring in the PM peak hour at full build-out (anticipated to be a conservative estimate due to trip rates not available for specific land uses on this site). **It was determined that the existing roadway system and access can adequately accommodate the projected traffic volumes for buildout conditions.** It is acknowledged that some of the study intersections will continue to have movements that will operate at LOS E which is typical for left-turn and side-street movements during peak periods. The recommendations listed below should be considered.

Existing/Background Conditions (Non-Project Related):

- **Mississippi Avenue at Potomac Street:** Extend the southbound left-turn storage from 50 feet to 135 feet with restriping. *[Existing]*
- **Potomac Street at Louisiana Avenue:** Extend the eastbound left-turn storage length from 60 feet to 250 feet with restriping. *[Existing]*
- **All signalized intersections:** Adjust signal timing as appropriate to accommodate increases in volume or change in travel patterns. Balance the green time to serve all the movements, pedestrian crossings, and on-street bike facilities.

Project Conditions:

- **Existing Access on Potomac Street:** Maintain one inbound lane and outbound lane and side-street stop-control. Include a marked crosswalk or raised crosswalk on the access approach.
- **All signalized intersections:** Adjust signal timing as appropriate to accommodate increases in volume or change in travel patterns. Balance the green time to serve all the movements, pedestrian crossings, and on-street bike facilities.

The proposed lengths of auxiliary lanes are listed in **Table 2**. Note that the traffic study provides technical information and evaluates the need for transportation mitigation as traffic grows, but it does not address infrastructure commitments or obligations of the Aurora Mental Health Center.

Tables and Figures:

Table 1 – Peak Hour Intersection LOS Summary

Table 2 – Peak Hour Estimated Queues and Proposed Auxiliary Lanes

Table 3 – Trip Generation Summary

Figure 1 – Vicinity Map

Figure 2 – Conceptual Site Plan

Figure 3 – Existing Traffic Volumes

Figure 4 – Year 2025 Background Traffic Volumes

Figure 5 – Year 2040 Background Traffic Volumes

Figure 6 – Site Trip Distribution

Figure 7 – Site-Generated Trip Volumes

Figure 8 – Year 2025 Background + Site-Generated Traffic Volumes

Figure 9 – Year 2040 Background + Site-Generated Traffic Volumes

Table 1 - Peak Hour Intersection Level of Service Summary

Intersection and Lanes Groups	2022 Existing				2025 Background				2025 Bkgrd + Project				2040 Background				2040 Bkgrd + Project			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
STOP SIGN CONTROL																				
3. Potomac Street at Existing Access	0	A	0	A	0	A	0	A	1	A	2	A	0	A	0	A	1	A	2	A
Westbound Left+Right	15	C	0	A	16	C	0	A	15	B	22	C	16	C	0	A	16	C	21	C
Northbound Through+Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
Southbound Left	0	A	0	A	0	A	0	A	8	A	10	A	0	A	0	A	8	A	10	A
Southbound Through	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
4. Potomac Street at Arkansas Drive	3	A	3	A	3	A	3	A	2	A	3	A	3	A	4	A	3	A	4	A
Eastbound Left	24	C	19	C	25	C	20	C	27	D	21	C	27	D	22	C	27	D	24	C
Eastbound Through+Right	12	B	11	B	13	B	11	B	13	B	11	B	13	B	11	B	13	B	11	B
Westbound Left	23	C	17	C	24	C	17	C	25	D	18	C	26	D	19	C	26	D	21	C
Westbound Through+Right	11	B	11	B	11	B	11	B	11	B	11	B	11	B	12	B	11	B	12	B
Northbound Left	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
Northbound Through+Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
Southbound Left	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
Southbound Through+Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
5. Louisiana Avenue at Wheeling Way	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
Eastbound Left+Through+Right	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
Westbound Left+Through+Right	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
Northbound Left+Through+Right	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
Southbound Left+Through+Right	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
SIGNAL CONTROL																				
1. Potomac Street at Mississippi Avenue	31	C	31	C	31	C	32	C	35	C	33	C	33	C	32	C	34	C	33	C
Eastbound Left	69	E	67	E	69	E	67	E	69	E	67	E	70	E	67	E	70	E	67	E
Eastbound Through	32	C	27	C	33	C	29	C	37	D	31	C	38	D	31	C	40	D	33	C
Eastbound Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
Westbound Left	53	D	56	E	54	D	57	E	54	D	58	E	54	D	59	E	54	D	60	E
Westbound Through+Right	15	B	20	B	15	B	21	C	17	B	22	C	18	B	21	C	18	B	22	C
Northbound Left	50	D	45	D	50	D	44	D	65	E	43	D	50	D	46	D	50	D	46	D
Northbound Through	58	E	53	D	58	E	53	D	63	E	51	D	58	E	56	E	58	E	56	E
Northbound Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
Southbound Left	46	D	42	D	45	D	42	D	44	D	40	D	45	D	45	D	45	D	45	D
Southbound Through	51	D	49	D	50	D	49	D	48	D	50	D	50	D	53	D	50	D	56	E
Southbound Right	50	D	59	E	50	D	59	E	48	D	59	E	49	D	46	D	49	D	47	D
2. Potomac Street at Louisiana Avenue	11	B	10	B	11	B	11	B	11	B	11	B	11	B	11	B	12	B	11	B
Eastbound Left+Through	59	E	59	E	59	E	59	E	59	E	59	E	59	E	59	E	59	E	59	E
Eastbound Right	55	D	53	D	55	D	52	D	55	E	53	D	55	D	53	D	55	E	54	D
Westbound Left+Through+Right	56	E	53	D	56	E	52	D	56	E	52	D	61	E	53	D	61	E	53	D
Northbound Left	10	A	4	A	10	B	5	A	12	B	5	A	10	B	4	A	12	B	5	A
Northbound Through+Right	3	A	6	A	3	A	6	A	3	A	7	A	3	A	5	A	3	A	6	A
Southbound Left	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
Southbound Through+Right	7	A	4	A	7	A	4	A	8	A	4	A	7	A	4	A	8	A	4	A

Note: Delay represented in average seconds per vehicle.

Table 1 - Peak Hour Intersection Level of Service Summary

Intersection and Lanes Groups	2022 Existing				2025 Background				2025 Bkgrd + Project				2040 Background				2040 Bkgrd + Project			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
STOP SIGN CONTROL																				
3. Potomac Street at Existing Access	0	A	0	A	0	A	0	A	1	A	2	A	0	A	0	A	1	A	2	A
Westbound Left+Right	15	C	0	A	16	C	0	A	15	B	22	C	16	C	0	A	16	C	21	C
Northbound Through+Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
Southbound Left	0	A	0	A	0	A	0	A	8	A	10	A	0	A	0	A	8	A	10	A
Southbound Through	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
4. Potomac Street at Arkansas Drive	3	A	3	A	3	A	3	A	2	A	3	A	3	A	4	A	3	A	4	A
Eastbound Left	24	C	19	C	25	C	20	C	27	D	21	C	27	D	22	C	27	D	24	C
Eastbound Through+Right	12	B	11	B	13	B	11	B	13	B	11	B	13	B	11	B	13	B	11	B
Westbound Left	23	C	17	C	24	C	17	C	25	D	18	C	26	D	19	C	26	D	21	C
Westbound Through+Right	11	B	11	B	11	B	11	B	11	B	11	B	11	B	12	B	11	B	12	B
Northbound Left	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
Northbound Through+Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
Southbound Left	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
Southbound Through+Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
5. Louisiana Avenue at Wheeling Way	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
Eastbound Left+Through+Right	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
Westbound Left+Through+Right	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
Northbound Left+Through+Right	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
Southbound Left+Through+Right	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A
SIGNAL CONTROL																				
1. Potomac Street at Mississippi Avenue	31	C	31	C	31	C	32	C	35	C	33	C	33	C	32	C	34	C	33	C
Eastbound Left	69	E	67	E	69	E	67	E	69	E	67	E	70	E	67	E	70	E	67	E
Eastbound Through	32	C	27	C	33	C	29	C	37	D	31	C	38	D	31	C	40	D	33	C
Eastbound Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
Westbound Left	53	D	56	E	54	D	57	E	54	D	58	E	54	D	59	E	54	D	60	E
Westbound Through+Right	15	B	20	B	15	B	21	C	17	B	22	C	18	B	21	C	18	B	22	C
Northbound Left	50	D	45	D	50	D	44	D	65	E	43	D	50	D	46	D	50	D	46	D
Northbound Through	58	E	53	D	58	E	53	D	63	E	51	D	58	E	56	E	58	E	56	E
Northbound Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
Southbound Left	46	D	42	D	45	D	42	D	44	D	40	D	45	D	45	D	45	D	45	D
Southbound Through	51	D	49	D	50	D	49	D	48	D	50	D	50	D	53	D	50	D	56	E
Southbound Right	50	D	59	E	50	D	59	E	48	D	59	E	49	D	46	D	49	D	47	D
2. Potomac Street at Louisiana Avenue	11	B	10	B	11	B	11	B	11	B	11	B	11	B	11	B	12	B	11	B
Eastbound Left+Through	59	E	59	E	59	E	59	E	59	E	59	E	59	E	59	E	59	E	59	E
Eastbound Right	55	D	53	D	55	D	52	D	55	E	53	D	55	D	53	D	55	E	54	D
Westbound Left+Through+Right	56	E	53	D	56	E	52	D	56	E	52	D	61	E	53	D	61	E	53	D
Northbound Left	10	A	4	A	10	B	5	A	12	B	5	A	10	B	4	A	12	B	5	A
Northbound Through+Right	3	A	6	A	3	A	6	A	3	A	7	A	3	A	5	A	3	A	6	A
Southbound Left	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
Southbound Through+Right	7	A	4	A	7	A	4	A	8	A	4	A	7	A	4	A	8	A	4	A

Note: Delay represented in average seconds per vehicle.

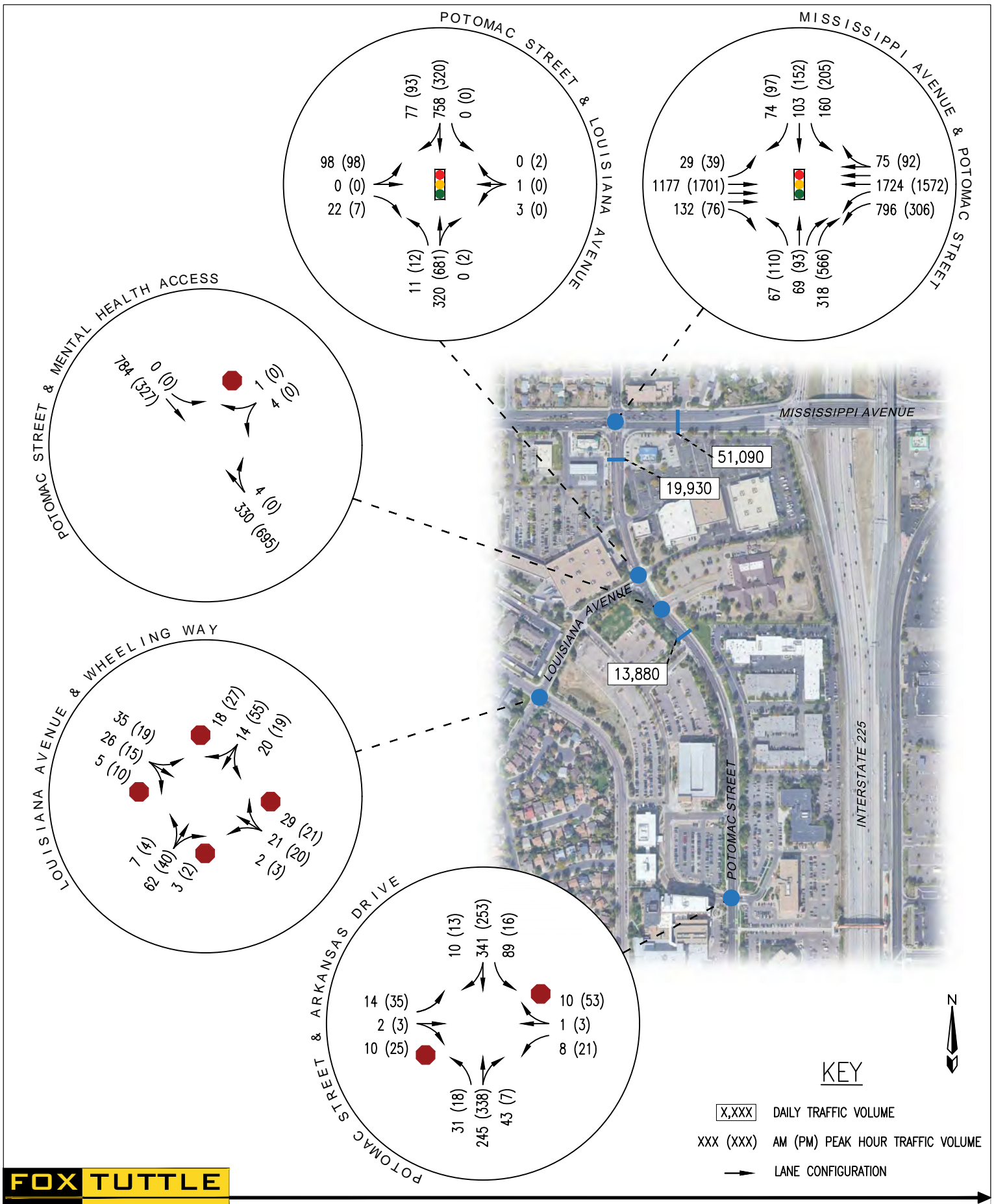
Table 3 - Trip Generation Summary

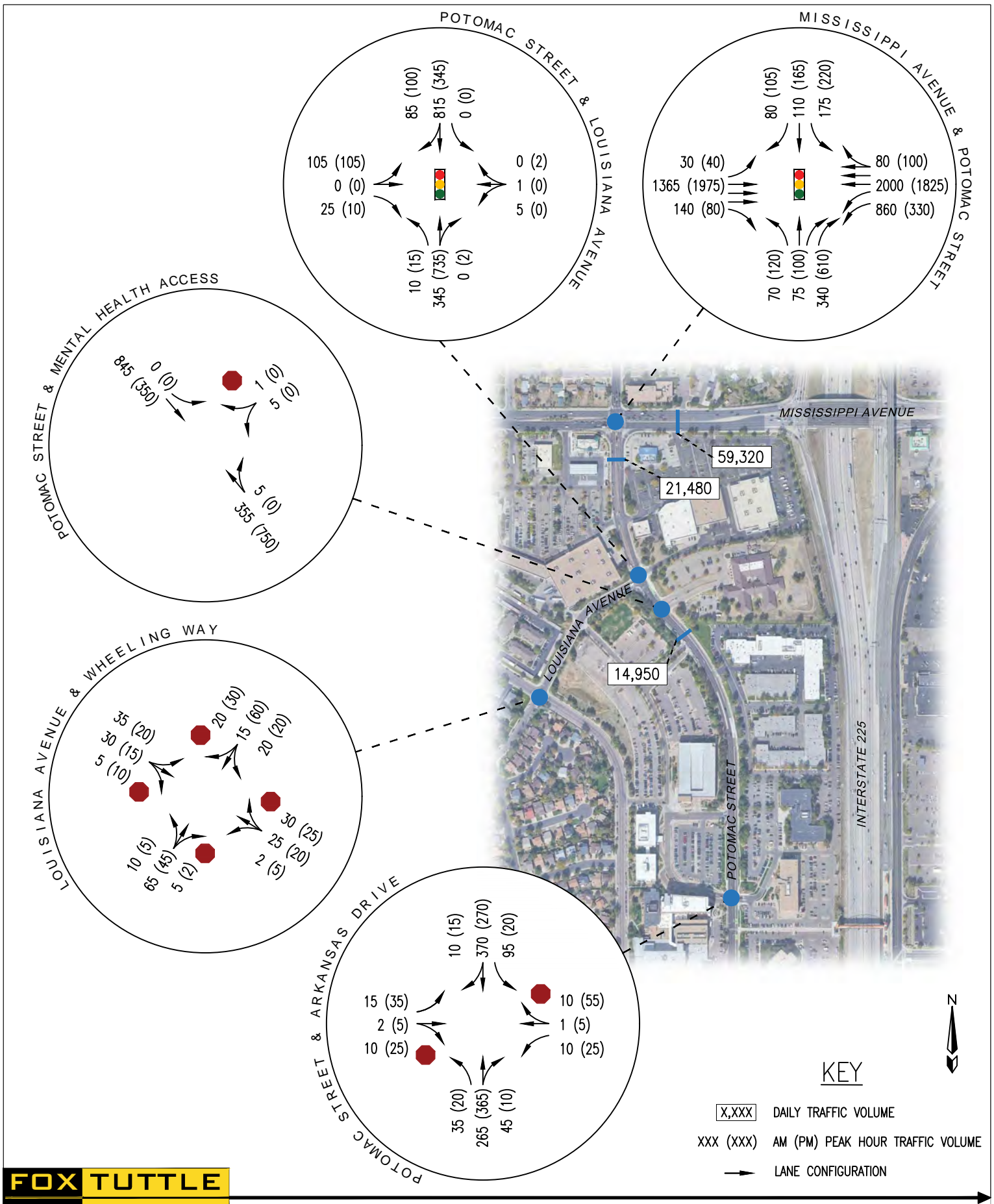
Land Use	Size	Unit	Internal Capture	Non-Auto Factor	Average Daily Trips				AM Peak Hour Trips				PM Peak Hour Trips			
					Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
ITE#223: Affordable Housing	40	DU	1.00	0.95	4.81	183	92	91	0.36	14	4	10	0.46	17	10	7
ITE#630: Clinic	30	ksf	1.00	0.95	37.60	1,072	536	536	2.75	78	63	15	3.69	105	32	73
ITE#610: Hospital	50	ksf	1.00	0.95	10.77	512	256	256	0.82	39	26	13	0.86	41	14	27
Total Trips						1,767	884	883		131	93	38		163	56	107

Source : ITE Trip Generation 11th Edition, 2021.



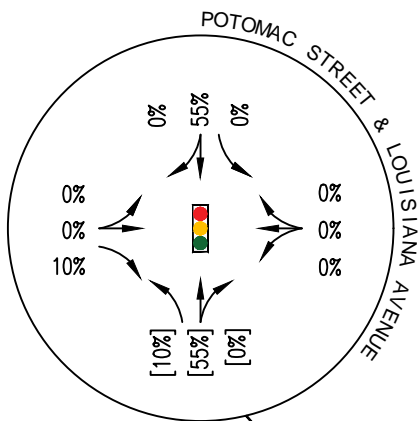






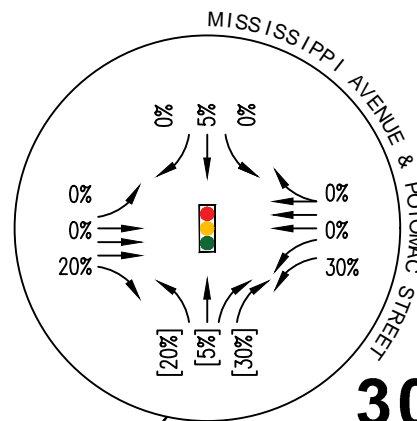
20%

To/From West via
Mississippi Avenue



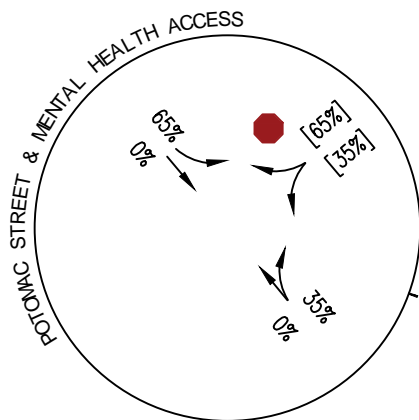
5%

To/From North via
Potomac Street



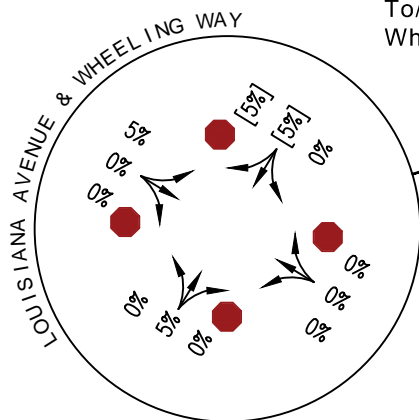
30%

To/From East via
Mississippi Avenue



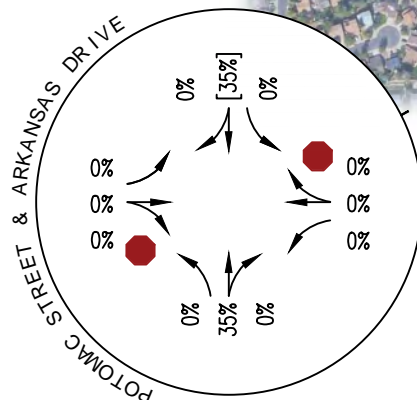
5%

To/From West via
Wheeling Way



5%

To/From South via
Louisiana Avenue



35%

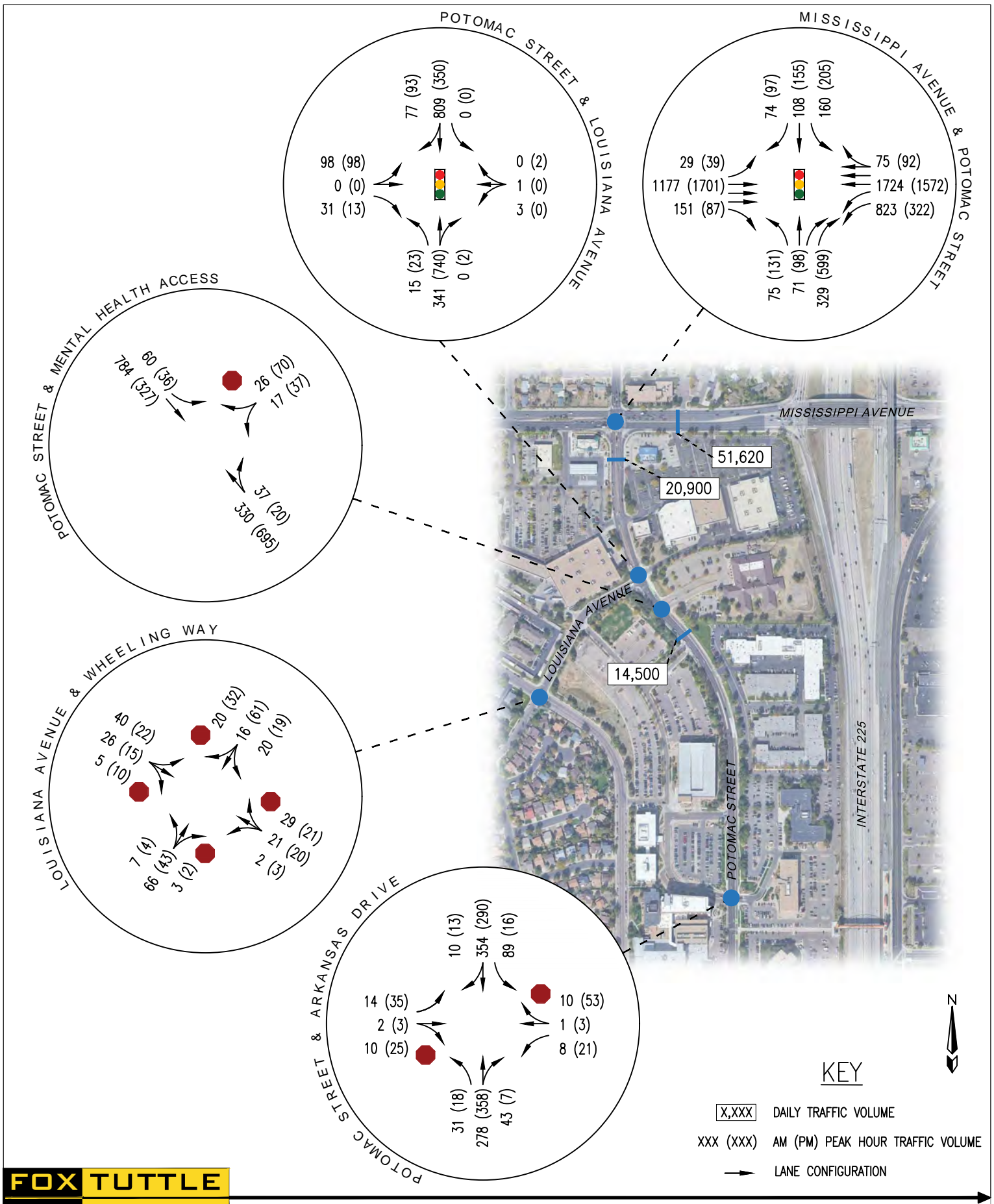
To/From South via
Potomac Street

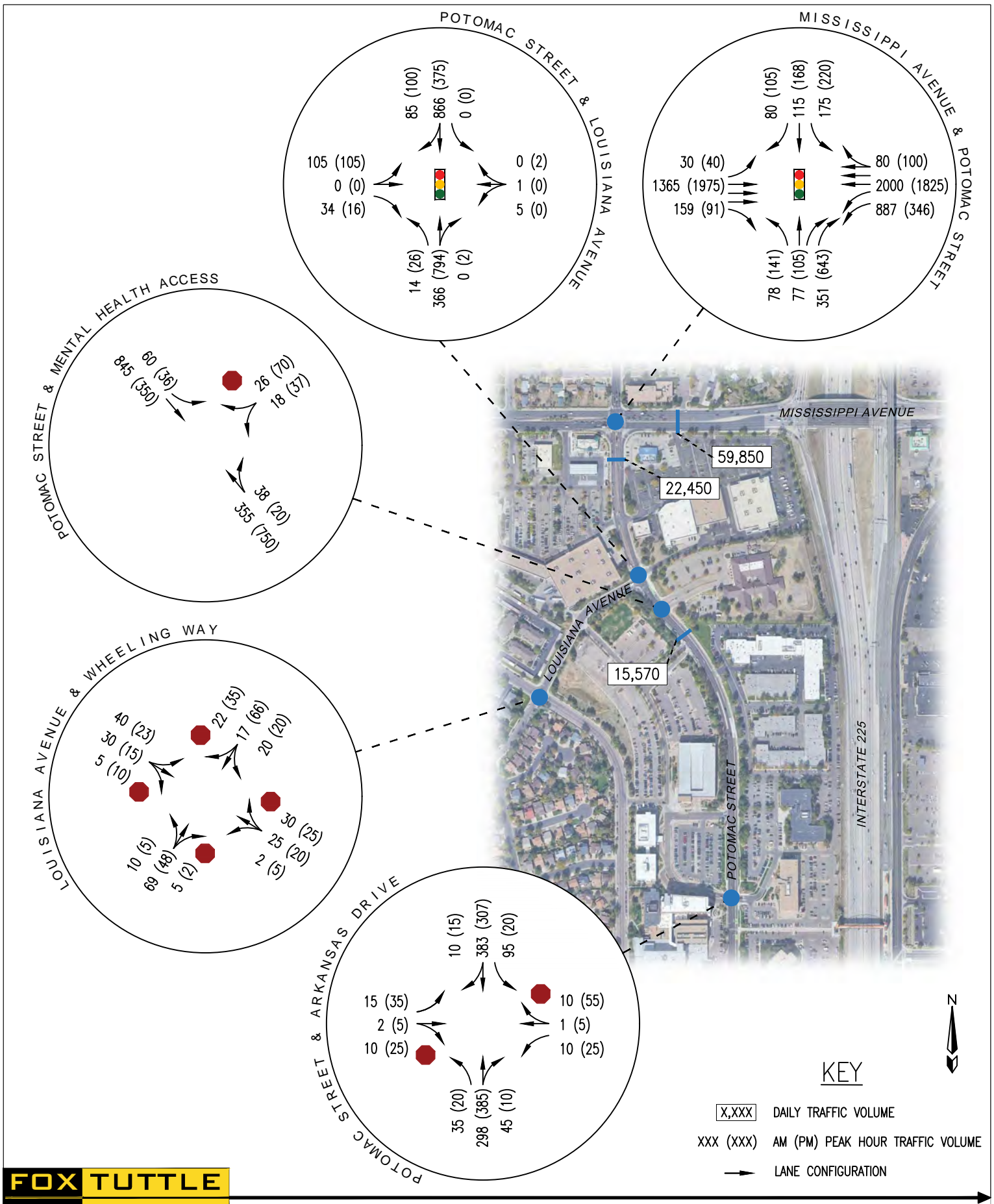


KEY

XX% [XX%] ENTERING [EXITING] PERCENTAGE

→ LANE CONFIGURATION





AURORA (POTOMAC) MENTAL HEALTH CENTER - AURORA, CO
YEAR 2040 BACKGROUND + SITE-GENERATED TRAFFIC VOLUMES

Project #	22023	Original Scale	NTS	Date	5/16/2022	Drawn by	CRS	Figure #	9
-----------	-------	----------------	-----	------	-----------	----------	-----	----------	---

Appendix:

Level of Service Definitions

Existing Traffic Data

Intersection Capacity Worksheets

Signal Warrant Worksheets

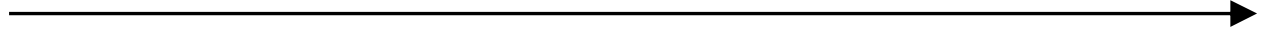
Level of Service Definitions

LEVEL OF SERVICE DEFINITIONS

In rating roadway and intersection operating conditions with existing or future traffic volumes, “Levels of Service” (LOS) A through F are used, with LOS A indicating very good operation and LOS F indicating poor operation. Levels of service at signalized and unsignalized intersections are closely associated with vehicle delays experienced in seconds per vehicle. More complete level of service definitions and delay data for signal and stop sign controlled intersections are contained in the following table for reference.

Level of Service Rating	Delay in seconds per vehicle (a)		Definition
	Signalized	Unsignalized	
A	0.0 to 10.0	0.0 to 10.0	Low vehicular traffic volumes; primarily free flow operations. Density is low and vehicles can freely maneuver within the traffic stream. Drivers are able to maintain their desired speeds with little or no delay.
B	10.1 to 20.0	10.1 to 15.0	Stable vehicular traffic volume flow with potential for some restriction of operating speeds due to traffic conditions. Vehicle maneuvering is only slightly restricted. The stopped delays are not bothersome and drivers are not subject to appreciable tension.
C	20.1 to 35.0	15.1 to 25.0	Stable traffic operations, however the ability for vehicles to maneuver is more restricted by the increase in traffic volumes. Relatively satisfactory operating speeds prevail, but adverse signal coordination or longer vehicle queues cause delays along the corridor.
D	35.1 to 55.0	25.1 to 35.0	Approaching unstable vehicular traffic flow where small increases in volume could cause substantial delays. Most drivers are restricted in ability to maneuver and selection of travel speeds due to congestion. Driver comfort and convenience are low, but tolerable.
E	55.1 to 80.0	35.1 to 50.0	Traffic operations characterized by significant approach delays and average travel speeds of one-half to one-third the free flow speed. Vehicular flow is unstable and there is potential for stoppages of brief duration. High signal density, extensive vehicle queuing, or corridor signal progression/timing are the typical causes of vehicle delays at signalized corridors.
F	> 80.0	> 50.0	Forced vehicular traffic flow and operations with high approach delays at critical intersections. Vehicle speeds are reduced substantially, and stoppages may occur for short or long periods of time because of downstream congestion.

(a) Delay ranges based on Highway Capacity Manual (6th Edition, 2016) criteria.



Existing Traffic Data



Vehicle Classification Report Summary

Location: POTOMAC ST N-O EXISTING ACCESS

Count Direction: Northbound / Southbound

Date Range: 4/27/2022 to 4/27/2022

Site Code: 01

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Northbound	10	5,714	820	0	316	11	0	0	4	0	0	0	0	6,875
Percent	0.1%	83.1%	11.9%	0.0%	4.6%	0.2%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	19	5,603	656	1	209	11	0	1	0	1	0	0	0	6,501
Percent	0.3%	86.2%	10.1%	0.0%	3.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	29	11,317	1,476	1	525	22	0	1	4	1	0	0	0	13,376
Percent	0.2%	84.6%	11.0%	0.0%	3.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Vehicle Speed Report Summary

Location: POTOMAC ST N-O EXISTING ACCESS

Count Direction: Northbound / Southbound

Date Range: 4/27/2022 to 4/27/2022

Site Code: 01

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Northbound	94	474	1,074	1,348	1,659	1,660	497	58	10	1	0	0	0	0	0	0	0	6,875
Percent	1.4%	6.9%	15.6%	19.6%	24.1%	24.1%	7.2%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	21	40	346	2,180	2,719	957	203	33	2	0	0	0	0	0	0	0	0	6,501
Percent	0.3%	0.6%	5.3%	33.5%	41.8%	14.7%	3.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	115	514	1,420	3,528	4,378	2,617	700	91	12	1	0	0	0	0	0	0	0	13,376
Percent	0.9%	3.8%	10.6%	26.4%	32.7%	19.6%	5.2%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary				Total Study Speed Statistics			
Northbound				Northbound			
50th Percentile (Median)	26.5	mph		Mean (Average) Speed	25.7	mph	
85th Percentile	33.2	mph		10 mph Pace	23.9 - 33.9	mph	
95th Percentile	36.1	mph		Percent in Pace	48.9	%	
Southbound				Southbound			
50th Percentile (Median)	25.9	mph		Mean (Average) Speed	26.3	mph	
85th Percentile	30.6	mph		10 mph Pace	20.8 - 30.8	mph	
95th Percentile	34.2	mph		Percent in Pace	76.8	%	

Location: POTOMAC ST N-O EXISTING ACCESS
 Date Range: 4/27/2022 - 5/3/2022
 Site Code: 01

Time	Wednesday			Thursday			Friday			Saturday			Sunday			Monday			Tuesday			Mid-Week Average		
	4/27/2022			4/28/2022			4/29/2022			4/30/2022			5/1/2022			5/2/2022			5/3/2022					
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	28	31	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	31	59
1:00 AM	19	25	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	25	44
2:00 AM	26	15	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	15	41
3:00 AM	29	28	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	28	57
4:00 AM	38	27	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	27	65
5:00 AM	75	124	199	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	124	199
6:00 AM	168	395	563	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	168	395	563
7:00 AM	285	602	887	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	285	602	887
8:00 AM	315	690	1,005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	315	690	1,005
9:00 AM	494	479	973	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	494	479	973
10:00 AM	480	483	963	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	480	483	963
11:00 AM	551	406	957	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	551	406	957
12:00 PM	466	466	932	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	466	466	932
1:00 PM	486	465	951	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	486	465	951
2:00 PM	558	457	1,015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	558	457	1,015
3:00 PM	613	406	1,019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	613	406	1,019
4:00 PM	607	305	912	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	607	305	912
5:00 PM	538	298	836	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	538	298	836
6:00 PM	308	277	585	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	308	277	585
7:00 PM	315	187	502	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	315	187	502
8:00 PM	205	134	339	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	205	134	339
9:00 PM	111	95	206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	111	95	206
10:00 PM	107	70	177	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107	70	177
11:00 PM	53	36	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53	36	89
Total	6,875	6,501	13,376	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,875	6,501	13,376
Percent	51%	49%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51%	49%	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: POTOMAC ST S-O EXISTING ACCESS

Count Direction: Northbound / Southbound

Date Range: 4/27/2022 to 4/27/2022

Site Code: 02

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Northbound	7	5,835	863	0	312	12	0	0	3	2	0	0	0	7,034
Percent	0.1%	83.0%	12.3%	0.0%	4.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	10	5,275	944	3	379	21	0	0	5	0	0	0	1	6,638
Percent	0.2%	79.5%	14.2%	0.0%	5.7%	0.3%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Total	17	11,110	1,807	3	691	33	0	0	8	2	0	0	1	13,672
Percent	0.1%	81.3%	13.2%	0.0%	5.1%	0.2%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Vehicle Speed Report Summary

Location: POTOMAC ST S-O EXISTING ACCESS

Count Direction: Northbound / Southbound

Date Range: 4/27/2022 to 4/27/2022

Site Code: 02

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Northbound	3	87	310	1,089	2,572	2,254	626	79	12	2	0	0	0	0	0	0	0	7,034
Percent	0.0%	1.2%	4.4%	15.5%	36.6%	32.0%	8.9%	1.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	21	82	457	1,540	2,502	1,598	372	60	5	0	0	1	0	0	0	0	0	6,638
Percent	0.3%	1.2%	6.9%	23.2%	37.7%	24.1%	5.6%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	24	169	767	2,629	5,074	3,852	998	139	17	2	0	1	0	0	0	0	0	13,672
Percent	0.2%	1.2%	5.6%	19.2%	37.1%	28.2%	7.3%	1.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary				Total Study Speed Statistics			
Northbound				Northbound			
50th Percentile (Median)		29.1	mph	Mean (Average) Speed		28.8	mph
85th Percentile		33.9	mph	10 mph Pace		24.7 - 34.7	mph
95th Percentile		36.8	mph	Percent in Pace		69.3	%
Southbound				Southbound			
50th Percentile (Median)		27.4	mph	Mean (Average) Speed		27.3	mph
85th Percentile		32.7	mph	10 mph Pace		22.8 - 32.8	mph
95th Percentile		35.8	mph	Percent in Pace		66.4	%

Location: POTOMAC ST S-O EXISTING ACCESS
 Date Range: 4/27/2022 - 5/3/2022
 Site Code: 02

Time	Wednesday			Thursday			Friday			Saturday			Sunday			Monday			Tuesday			Mid-Week Average		
	4/27/2022			4/28/2022			4/29/2022			4/30/2022			5/1/2022			5/2/2022			5/3/2022					
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	27	31	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	31	58
1:00 AM	18	26	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	26	44
2:00 AM	26	15	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	15	41
3:00 AM	29	28	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	28	57
4:00 AM	38	27	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	27	65
5:00 AM	79	122	201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	79	122	201
6:00 AM	169	395	564	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	169	395	564
7:00 AM	288	617	905	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	288	617	905
8:00 AM	330	716	1,046	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	330	716	1,046
9:00 AM	477	505	982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	477	505	982
10:00 AM	498	486	984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	498	486	984
11:00 AM	574	406	980	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	574	406	980
12:00 PM	489	467	956	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	489	467	956
1:00 PM	491	487	978	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	491	487	978
2:00 PM	587	454	1,041	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	587	454	1,041
3:00 PM	615	427	1,042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	615	427	1,042
4:00 PM	633	316	949	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	633	316	949
5:00 PM	566	307	873	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	566	307	873
6:00 PM	312	277	589	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	312	277	589
7:00 PM	312	193	505	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	312	193	505
8:00 PM	209	132	341	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	209	132	341
9:00 PM	107	97	204	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107	97	204
10:00 PM	107	71	178	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107	71	178
11:00 PM	53	36	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53	36	89
Total	7,034	6,638	13,672	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,034	6,638	13,672
Percent	51%	49%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51%	49%	-

1. Mid-week average includes data between Tuesday and Thursday.

S POTOMAC ST E MISSISSIPPI

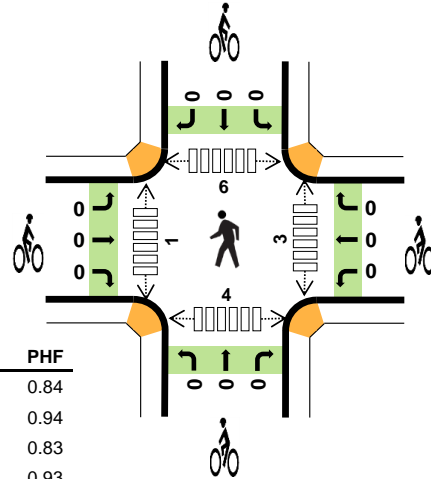
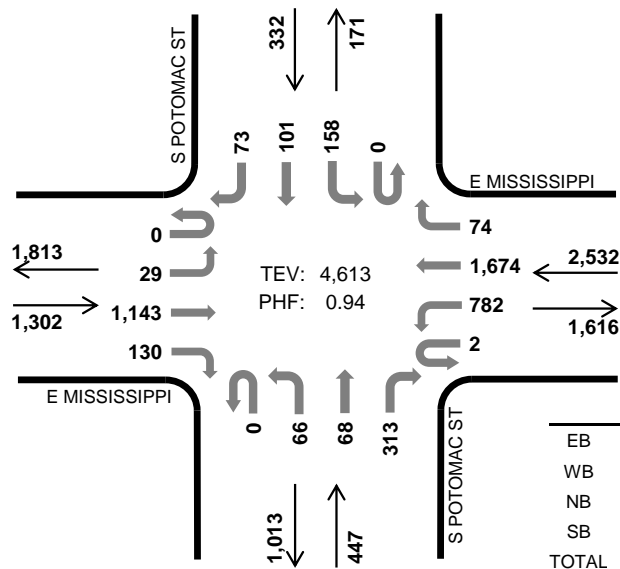


Peak Hour

Date: 04/27/2022

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	2.2%	0.84
WB	2.6%	0.94
NB	1.1%	0.83
SB	0.6%	0.93
TOTAL	2.2%	0.94

Two-Hour Count Summaries

Interval Start		E MISSISSIPPI				E MISSISSIPPI				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	5	224	8	0	102	239	21	0	13	12	52	0	30	23	6	735	0
7:15 AM		0	3	264	21	3	150	292	16	0	7	15	79	0	41	18	8	917	0
7:30 AM		0	2	248	18	0	168	426	27	0	20	17	98	0	55	17	13	1,109	0
7:45 AM		0	8	332	46	1	206	421	25	0	15	18	67	0	39	33	17	1,228	3,989
8:00 AM		0	7	262	30	1	242	420	12	0	15	8	67	0	32	28	26	1,150	4,404
8:15 AM		0	12	301	36	0	166	407	10	0	16	25	81	0	32	23	17	1,126	4,613
8:30 AM		0	6	240	20	0	147	361	17	0	9	8	76	0	28	20	14	946	4,450
8:45 AM		0	5	247	32	0	121	349	9	0	27	21	89	0	29	32	21	982	4,204
Count Total		0	48	2,118	211	5	1,302	2,915	137	0	122	124	609	0	286	194	122	8,193	0
Peak Hour	All	0	29	1,143	130	2	782	1,674	74	0	66	68	313	0	158	101	73	4,613	0
	HV	0	0	28	0	0	13	53	1	0	0	0	5	0	2	0	0	102	0
	HV%	-	0%	2%	0%	0%	2%	3%	1%	-	0%	0%	2%	-	1%	0%	0%	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	6	11	2	1	20	0	0	0	0	0	0	1	1	2	4
7:15 AM	6	8	1	1	16	0	0	0	0	0	1	0	1	2	4
7:30 AM	6	18	4	1	29	0	0	0	0	0	0	1	0	1	2
7:45 AM	2	11	0	1	14	0	0	0	0	0	1	0	4	0	5
8:00 AM	7	27	1	0	35	0	0	0	0	0	2	0	1	1	4
8:15 AM	13	11	0	0	24	0	0	0	0	0	0	0	1	2	3
8:30 AM	9	25	3	0	37	0	0	0	1	1	1	1	1	0	3
8:45 AM	6	10	7	2	25	0	0	0	0	0	0	2	2	2	6
Count Total	55	121	18	6	200	0	0	0	1	1	5	5	11	10	31
Peak Hour	28	67	5	2	102	0	0	0	0	0	3	1	6	4	14

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	E MISSISSIPPI				E MISSISSIPPI				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	6	0	0	4	6	1	0	0	1	1	0	0	1	0	20	0
7:15 AM	0	0	6	0	0	1	7	0	0	0	0	1	0	1	0	0	16	0
7:30 AM	0	0	6	0	0	2	16	0	0	0	0	4	0	1	0	0	29	0
7:45 AM	0	0	2	0	0	1	9	1	0	0	0	0	0	1	0	0	14	79
8:00 AM	0	0	7	0	0	8	19	0	0	0	0	1	0	0	0	0	35	94
8:15 AM	0	0	13	0	0	2	9	0	0	0	0	0	0	0	0	0	24	102
8:30 AM	0	0	7	2	0	5	20	0	0	0	0	3	0	0	0	0	37	110
8:45 AM	0	0	6	0	0	1	9	0	0	1	0	6	0	2	0	0	25	121
Count Total	0	0	53	2	0	24	95	2	0	1	1	16	0	5	1	0	200	0
Peak Hour	0	0	28	0	0	13	53	1	0	0	0	5	0	2	0	0	102	0

Two-Hour Count Summaries - Bikes																		
Interval Start	E MISSISSIPPI			E MISSISSIPPI			S POTOMAC ST			S POTOMAC ST			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	1				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
Count Total	0	0	0	0	0	0	0	0	0	1	0	0	1	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S POTOMAC ST E MISSISSIPPI

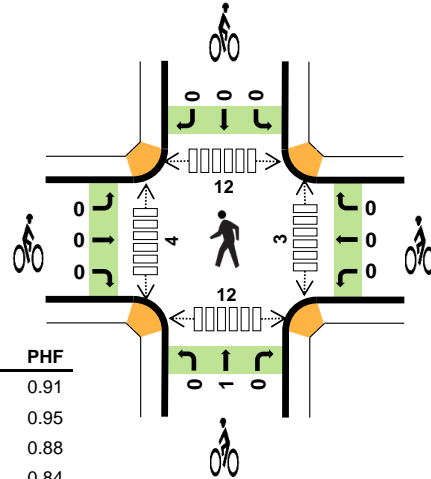
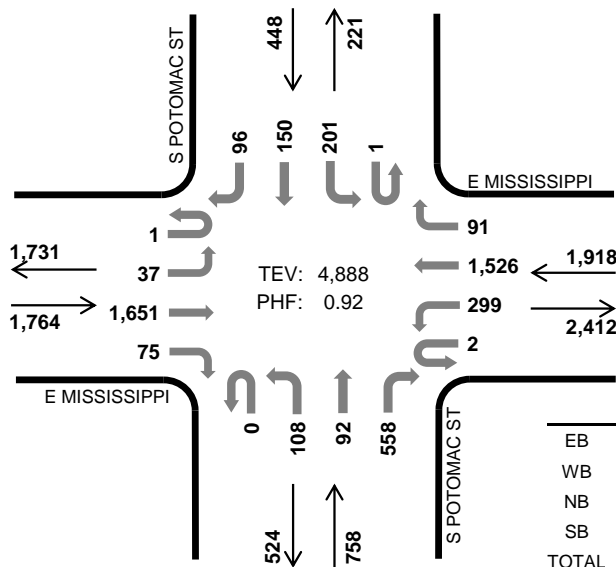


Peak Hour

Date: 04/27/2022

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	2.0%	0.91
WB	1.8%	0.95
NB	0.8%	0.88
SB	0.4%	0.84
TOTAL	1.6%	0.92

Two-Hour Count Summaries

Interval Start		E MISSISSIPPI				E MISSISSIPPI				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		1	8	460	18	0	59	422	24	0	29	33	140	1	64	43	26	1,328	0
4:15 PM		0	14	361	21	1	77	369	24	0	22	24	139	0	43	35	19	1,149	0
4:30 PM		0	9	439	22	0	89	367	25	0	36	18	162	0	56	29	29	1,281	0
4:45 PM		0	6	391	14	1	74	368	18	0	21	17	117	0	38	43	22	1,130	4,888
5:00 PM		1	3	388	15	0	96	342	15	0	38	27	202	0	40	28	24	1,219	4,779
5:15 PM		1	12	422	25	0	95	390	22	0	29	13	145	0	47	24	19	1,244	4,874
5:30 PM		1	13	408	17	0	87	396	23	0	26	21	104	0	41	38	21	1,196	4,789
5:45 PM		1	6	375	13	0	75	369	17	0	22	19	15	0	36	34	20	1,002	4,661
Count Total		5	71	3,244	145	2	652	3,023	168	0	223	172	1,024	1	365	274	180	9,549	0
Peak Hour	All	1	37	1,651	75	2	299	1,526	91	0	108	92	558	1	201	150	96	4,888	0
	HV	0	0	35	0	0	7	26	1	0	0	0	6	0	2	0	0	77	0
	HV%	0%	0%	2%	0%	0%	2%	2%	1%	-	0%	0%	1%	0%	1%	0%	0%	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	15	12	1	2	30	0	0	0	0	0	0	1	6	7	14
4:15 PM	5	5	1	0	11	0	0	0	0	0	0	2	1	1	4
4:30 PM	11	8	2	0	21	0	0	1	0	1	1	0	3	3	7
4:45 PM	4	9	2	0	15	0	0	0	0	0	2	1	2	1	6
5:00 PM	7	6	1	1	15	0	0	0	0	0	0	0	0	0	0
5:15 PM	3	8	3	2	16	0	0	0	0	0	0	1	0	0	1
5:30 PM	8	5	1	2	16	0	0	1	0	1	1	3	2	0	6
5:45 PM	1	4	4	1	10	0	0	0	0	0	0	1	0	2	3
Count Total	54	57	15	8	134	0	0	2	0	2	4	9	14	14	41
Peak Hour	35	34	6	2	77	0	0	1	0	1	3	4	12	12	31

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	E MISSISSIPPI				E MISSISSIPPI				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	15	0	0	2	9	1	0	0	0	1	0	2	0	0	30	0
4:15 PM	0	0	5	0	0	2	3	0	0	0	0	1	0	0	0	0	11	0
4:30 PM	0	0	11	0	0	2	6	0	0	0	0	2	0	0	0	0	21	0
4:45 PM	0	0	4	0	0	1	8	0	0	0	0	2	0	0	0	0	15	77
5:00 PM	0	0	7	0	0	3	3	0	0	1	0	0	0	1	0	0	15	62
5:15 PM	0	0	3	0	0	3	5	0	0	0	0	3	0	0	2	0	16	67
5:30 PM	0	0	8	0	0	2	3	0	0	0	0	1	0	1	1	0	16	62
5:45 PM	0	0	1	0	0	1	3	0	0	0	0	4	0	1	0	0	10	57
Count Total	0	0	54	0	0	16	40	1	0	1	0	14	0	5	3	0	134	0
Peak Hour	0	0	35	0	0	7	26	1	0	0	0	6	0	2	0	0	77	0

Two-Hour Count Summaries - Bikes																	
Interval Start	E MISSISSIPPI			E MISSISSIPPI			S POTOMAC ST			S POTOMAC ST			15-min Total	Rolling One Hour			
	Eastbound			Westbound			Northbound			Southbound							
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT					
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Count Total	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	
Peak Hour	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S POTOMAC ST E LOUISIANA AVE

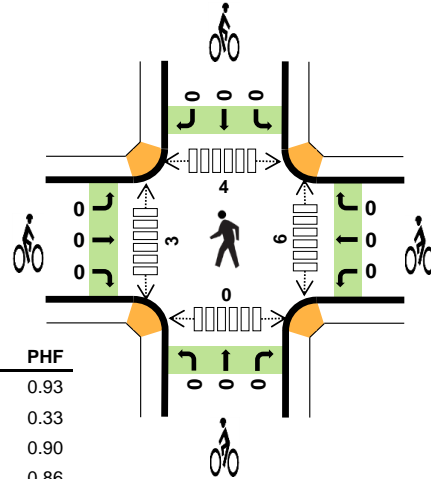
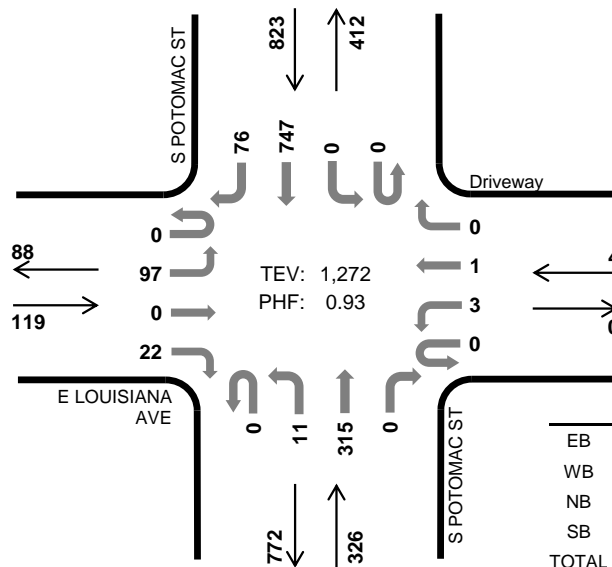


Peak Hour

Date: 04/27/2022

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	5.9%	0.93
WB	0.0%	0.33
NB	0.9%	0.90
SB	1.9%	0.86
TOTAL	2.0%	0.93

Two-Hour Count Summaries

Interval Start		E LOUISIANA AVE				Driveway				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	26	0	2	0	0	0	0	0	0	43	0	0	0	106	16	193	0
7:15 AM		0	38	0	1	0	0	0	0	0	3	71	1	0	1	139	18	272	0
7:30 AM		0	30	0	2	0	1	0	0	0	2	89	0	0	0	151	11	286	0
7:45 AM		0	27	0	3	0	2	1	0	0	3	73	0	0	0	207	14	330	1,081
8:00 AM		0	21	0	9	0	0	0	0	0	5	68	0	0	0	215	25	343	1,231
8:15 AM		0	19	0	8	0	0	0	0	0	1	85	0	0	0	174	26	313	1,272
8:30 AM		0	17	0	1	0	0	0	0	0	3	83	0	0	2	154	8	268	1,254
8:45 AM		0	20	0	3	0	0	0	1	0	2	94	0	0	0	149	8	277	1,201
Count Total		0	198	0	29	0	3	1	1	0	19	606	1	0	3	1,295	126	2,282	0
Peak Hour	All	0	97	0	22	0	3	1	0	0	11	315	0	0	0	747	76	1,272	0
	HV	0	1	0	6	0	0	0	0	0	0	3	0	0	0	9	7	26	0
	HV%	-	1%	-	27%	-	0%	0%	-	-	0%	1%	-	-	-	1%	9%	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	2	6	8	0	0	0	0	0	1	0	1	0	2
7:15 AM	1	0	2	0	3	0	0	0	0	0	0	3	1	0	4
7:30 AM	1	0	2	3	6	0	0	0	0	0	1	0	1	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
8:00 AM	3	0	1	9	13	0	0	0	0	0	2	3	2	0	7
8:15 AM	3	0	0	4	7	0	0	0	0	0	1	0	1	0	2
8:30 AM	1	0	4	5	10	0	0	0	0	0	1	1	1	2	5
8:45 AM	1	1	3	2	7	0	0	0	0	0	2	0	0	0	2
Count Total	10	1	14	29	54	0	0	0	0	0	10	7	7	2	26
Peak Hour	7	0	3	16	26	0	0	0	0	0	6	3	4	0	13

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	E LOUISIANA AVE				Driveway				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	3	8	0
7:15 AM	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	3	0	6	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
8:00 AM	0	0	0	3	0	0	0	0	0	0	1	0	0	0	5	4	13	22
8:15 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	3	7	26
8:30 AM	0	1	0	0	0	0	0	0	0	0	4	0	0	1	4	0	10	30
8:45 AM	0	1	0	0	0	0	0	1	0	0	3	0	0	0	1	1	7	37
Count Total	0	4	0	6	0	0	0	1	0	1	13	0	0	1	17	11	54	0
Peak Hour	0	1	0	6	0	0	0	0	0	0	3	0	0	0	9	7	26	0

Two-Hour Count Summaries - Bikes																		
Interval Start	E LOUISIANA AVE			Driveway			S POTOMAC ST			S POTOMAC ST			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S POTOMAC ST E LOUISIANA AVE

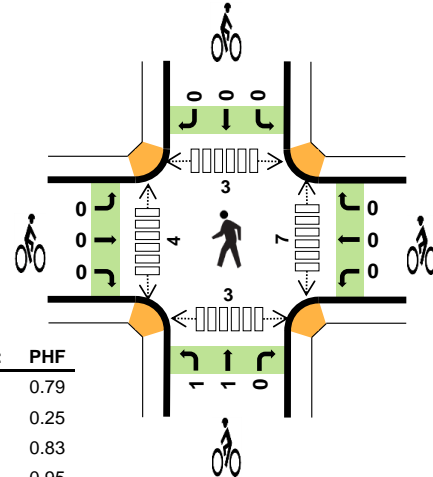
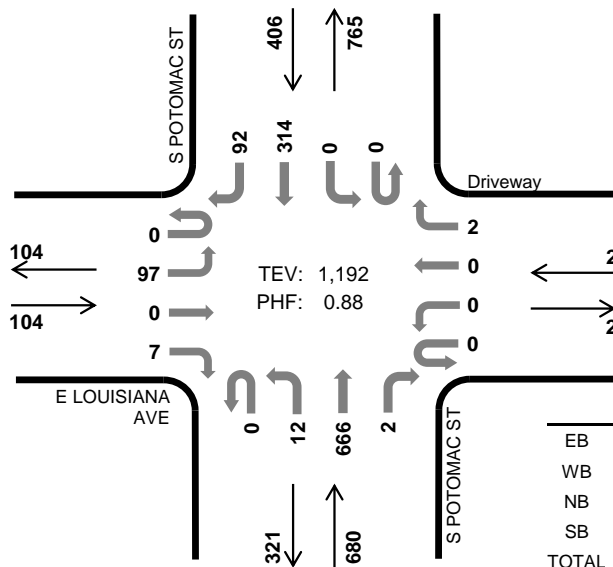


Peak Hour

Date: 04/27/2022

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 4:15 PM to 5:15 PM



Two-Hour Count Summaries

Interval Start		E LOUISIANA AVE				Driveway				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	31	0	1	0	0	0	0	0	4	159	0	0	0	86	12	293	0
4:15 PM		0	20	0	2	0	0	0	0	0	6	145	1	0	0	78	21	273	0
4:30 PM		0	30	0	3	0	0	0	2	0	2	171	1	0	0	68	32	309	0
4:45 PM		0	17	0	1	0	0	0	0	0	3	145	0	0	0	89	18	273	1,148
5:00 PM		0	30	0	1	0	0	0	0	0	1	205	0	0	0	79	21	337	
5:15 PM		0	25	0	0	0	1	0	1	0	4	139	1	0	1	76	17	265	1,184
5:30 PM		0	24	0	1	0	0	0	0	0	3	106	0	0	1	91	24	250	1,125
5:45 PM		0	23	0	3	0	0	0	1	0	2	106	1	0	0	63	25	224	1,076
Count Total		0	200	0	12	0	1	0	4	0	25	1,176	4	0	2	630	170	2,224	0
Peak Hour	All	0	97	0	7	0	0	0	2	0	12	666	2	0	0	314	92	1,192	0
	HV	0	2	0	0	0	0	0	0	0	0	11	0	0	0	7	1	21	0
	HV%	-	2%	-	0%	-	-	-	0%	-	0%	2%	0%	-	-	2%	1%	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	1	2	3	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	3	1	4	0	0	0	0	0	1	1	0	0	2
4:30 PM	0	0	3	2	5	0	0	1	0	1	2	1	0	1	4
4:45 PM	2	0	1	2	5	0	0	0	0	0	1	1	0	1	3
5:00 PM	0	0	4	3	7	0	0	1	0	1	3	1	3	1	8
5:15 PM	0	0	3	5	8	0	0	0	0	0	1	1	2	0	4
5:30 PM	0	0	3	4	7	0	0	0	0	0	1	1	1	1	4
5:45 PM	0	0	3	2	5	0	0	0	0	0	0	0	0	1	1
Count Total	2	0	21	21	44	0	0	2	0	2	9	7	6	5	27
Peak Hour	2	0	11	8	21	0	0	2	0	2	7	4	3	3	17

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	E LOUISIANA AVE				Driveway				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	4	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	5	0
4:45 PM	0	2	0	0	0	0	0	0	0	0	1	0	0	0	2	0	5	17
5:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	7	21
5:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	1	8	25
5:30 PM	0	0	0	0	0	0	0	0	0	1	2	0	0	0	4	0	7	27
5:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	5	27
Count Total	0	2	0	0	0	0	0	0	0	1	20	0	0	0	18	3	44	0
Peak Hour	0	2	0	0	0	0	0	0	0	0	11	0	0	0	7	1	21	0

Two-Hour Count Summaries - Bikes																		
Interval Start	E LOUISIANA AVE			Driveway			S POTOMAC ST			S POTOMAC ST			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0				
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	2				
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
Count Total	0	0	0	0	0	0	1	1	0	0	0	0	2	0				
Peak Hour	0	0	0	0	0	0	1	1	0	0	0	0	2	0				

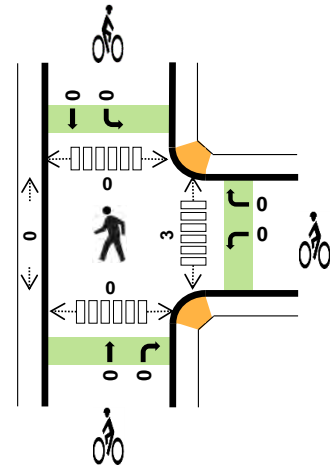
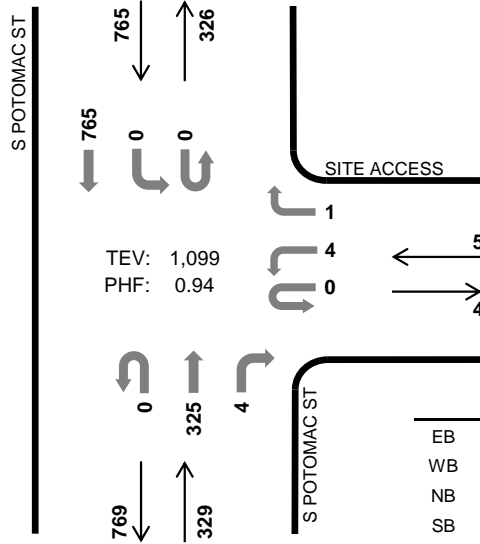
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S POTOMAC ST SITE ACCESS



Peak Hour

Date: 04/27/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



Two-Hour Count Summaries

Interval Start		N/A				SITE ACCESS				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	0	0	0	0	0	0	0	0	47	0	0	0	113	0	160	0
7:15 AM		0	0	0	0	0	1	0	0	0	0	72	1	0	1	139	0	214	0
7:30 AM		0	0	0	0	0	0	0	1	0	0	89	0	0	0	153	0	243	0
7:45 AM		0	0	0	0	0	1	0	0	0	0	76	2	0	0	213	0	292	909
8:00 AM		0	0	0	0	0	1	0	0	0	0	72	0	0	0	214	0	287	1,036
8:15 AM		0	0	0	0	0	2	0	0	0	0	88	2	0	0	185	0	277	1,099
8:30 AM		0	0	0	0	0	1	0	0	0	0	86	1	0	0	152	0	240	1,096
8:45 AM		0	0	0	0	0	0	0	0	0	0	95	0	0	0	155	0	250	1,054
Count Total		0	0	0	0	0	6	0	1	0	0	625	6	0	1	1,324	0	1,963	0
Peak Hour	All	0	0	0	0	0	4	0	1	0	0	325	4	0	0	765	0	1,099	0
	HV	0	0	0	0	0	0	0	0	0	0	4	0	0	0	14	0	18	0
	HV%	-	-	-	-	-	0%	-	0%	-	-	1%	0%	-	-	2%	-	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	2	3	5	0	0	0	0	0	1	1	0	0	2
7:15 AM	0	0	2	0	2	0	0	0	0	0	0	3	0	0	3
7:30 AM	0	0	2	3	5	0	0	0	0	0	1	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:00 AM	0	0	1	6	7	0	0	0	0	0	1	0	0	0	1
8:15 AM	0	0	1	5	6	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	4	6	10	0	0	0	0	0	4	0	0	0	4
8:45 AM	0	0	3	1	4	0	0	0	0	0	1	0	0	0	1
Count Total	0	0	15	24	39	0	0	0	0	0	9	4	0	0	13
Peak Hr	0	0	4	14	18	0	0	0	0	0	3	0	0	0	3

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	N/A				SITE ACCESS				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	6	0	7	14
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	6	18
8:30 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	6	0	10	23
8:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	4	27
Count Total	0	0	0	0	0	0	0	0	0	0	15	0	0	0	24	0	39	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	4	0	0	0	14	0	18	0

Two-Hour Count Summaries - Bikes																		
Interval Start	N/A			SITE ACCESS			S POTOMAC ST			S POTOMAC ST			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

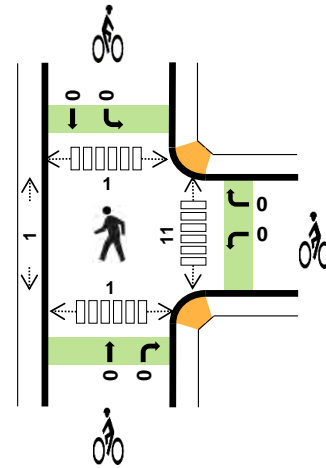
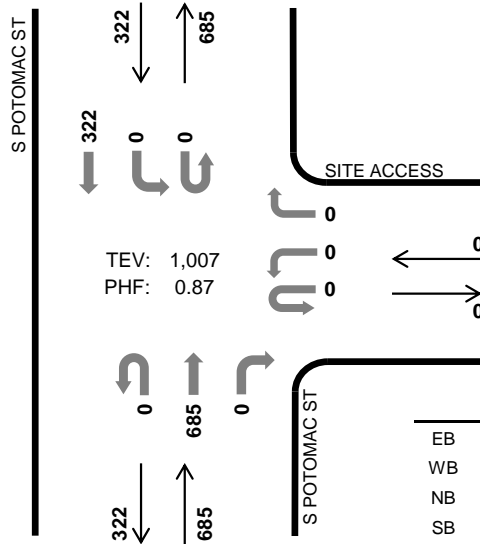
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S POTOMAC ST SITE ACCESS



Peak Hour

Date: 04/27/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	-	-
WB	-	-
NB	1.6%	0.82
SB	2.8%	0.89
TOTAL	2.0%	0.87

Two-Hour Count Summaries

Interval Start		N/A				SITE ACCESS				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	0	0	1	0	0	161	0	0	0	88	0	250	0
4:15 PM		0	0	0	0	0	0	0	0	0	0	154	0	0	0	80	0	234	0
4:30 PM		0	0	0	0	0	0	0	0	0	0	173	0	0	0	71	0	244	0
4:45 PM		0	0	0	0	0	0	0	0	0	0	148	0	0	0	90	0	238	966
5:00 PM		0	0	0	0	0	0	0	0	0	0	210	0	0	0	81	0	291	1,007
5:15 PM		0	0	0	0	0	0	0	0	0	0	138	0	0	0	77	0	215	988
5:30 PM		0	0	0	0	0	0	0	0	0	0	110	0	0	0	92	0	202	946
5:45 PM		0	0	0	0	0	0	0	0	0	0	111	0	0	0	66	0	177	885
Count Total		0	0	0	0	0	0	0	1	0	0	1,205	0	0	0	645	0	1,851	0
Peak Hour	All	0	0	0	0	0	0	0	0	0	0	685	0	0	0	322	0	1,007	0
	HV	0	0	0	0	0	0	0	0	0	0	11	0	0	0	9	0	20	0
	HV%	-	-	-	-	-	-	-	-	-	-	2%	-	-	-	3%	-	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	3	2	5	0	0	0	0	0	1	0	0	1	2
4:30 PM	0	0	3	1	4	0	0	0	0	0	4	1	1	0	6
4:45 PM	0	0	1	3	4	0	0	0	0	0	1	0	0	0	1
5:00 PM	0	0	4	3	7	0	0	0	0	0	5	0	0	0	5
5:15 PM	0	0	2	3	5	0	0	0	0	0	2	1	0	0	3
5:30 PM	0	0	4	4	8	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	3	2	5	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	21	20	41	0	0	0	0	0	13	3	1	1	18
Peak Hr	0	0	11	9	20	0	0	0	0	0	11	1	1	1	14

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	N/A				SITE ACCESS				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	5	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	4	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	16
5:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	7	20
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5	20
5:30 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	8	24
5:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	5	25
Count Total	0	0	0	0	0	0	0	0	0	0	21	0	0	0	20	0	41	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	11	0	0	0	9	0	20	0

Two-Hour Count Summaries - Bikes																		
Interval Start	N/A			SITE ACCESS			S POTOMAC ST			S POTOMAC ST			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

E LOUISIANA AVE S WHEELING WAY

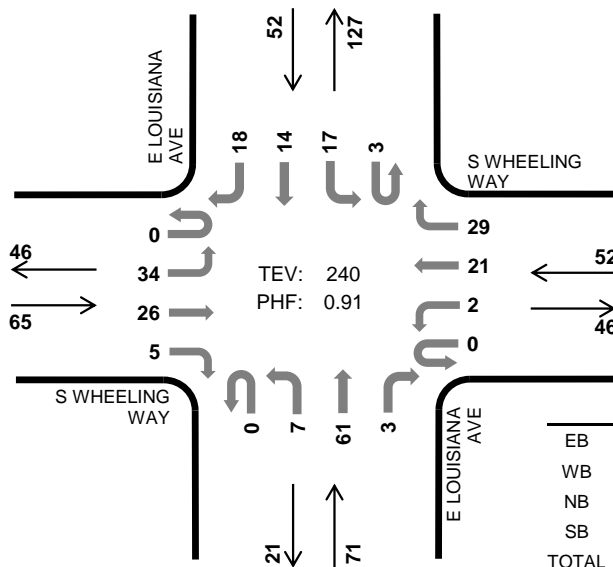


Peak Hour

Date: 04/27/2022

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 7:15 AM to 8:15 AM



	HV %:	PHF
EB	6.2%	0.77
WB	7.7%	0.93
NB	0.0%	0.71
SB	9.6%	0.62
TOTAL	5.4%	0.91

Two-Hour Count Summaries

Interval Start		S WHEELING WAY				S WHEELING WAY				E LOUISIANA AVE				E LOUISIANA AVE				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	6	5	1	0	1	2	7	0	2	15	1	0	3	5	0	48	0
7:15 AM		0	14	6	1	0	1	4	8	0	4	19	2	0	2	2	3	66	0
7:30 AM		0	4	7	2	0	0	5	9	0	0	19	0	0	3	3	5	57	0
7:45 AM		0	8	5	2	0	0	7	6	0	1	12	1	0	4	3	6	55	226
8:00 AM		0	8	8	0	0	1	5	6	0	2	11	0	3	8	6	4	62	240
8:15 AM		0	6	7	1	0	0	6	5	0	1	11	0	0	6	6	4	53	227
8:30 AM		0	4	6	2	0	1	2	4	0	4	9	2	0	3	3	3	43	213
8:45 AM		0	4	2	0	0	0	3	4	0	0	16	3	0	3	5	1	41	199
Count Total		0	54	46	9	0	4	34	49	0	14	112	9	3	32	33	26	425	0
Peak Hour	All	0	34	26	5	0	2	21	29	0	7	61	3	3	17	14	18	240	0
	HV	0	1	2	1	0	0	3	1	0	0	0	0	3	0	1	1	13	0
	HV%	-	3%	8%	20%	-	0%	14%	3%	-	0%	0%	0%	100%	0%	7%	6%	5%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	1	0	2	4	0	0	0	0	0	0	0	1	0	1
7:15 AM	2	0	0	2	4	0	0	0	0	0	2	0	2	2	6
7:30 AM	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1
7:45 AM	1	0	0	0	1	0	0	0	0	0	1	0	1	0	2
8:00 AM	0	2	0	3	5	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	2	2	0	1	5	0	0	0	0	0	1	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	7	7	0	8	22	0	0	0	0	0	4	2	5	2	13
Peak Hour	4	4	0	5	13	0	0	0	0	0	3	1	4	2	10

Two-Hour Count Summaries - Heavy Vehicles																			
Interval Start	S WHEELING WAY				S WHEELING WAY				E LOUISIANA AVE				E LOUISIANA AVE				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	4	0
7:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	4	0
7:30 AM	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3	0
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12
8:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	3	0	0	0	5	13
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
8:30 AM	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	1	5	11
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Count Total	0	2	4	1	0	0	5	2	0	0	0	0	3	0	3	2		22	0
Peak Hour	0	1	2	1	0	0	3	1	0	0	0	0	3	0	1	1		13	0

Two-Hour Count Summaries - Bikes																	
Interval Start	S WHEELING WAY			S WHEELING WAY			E LOUISIANA AVE			E LOUISIANA AVE			15-min Total	Rolling One Hour			
	Eastbound			Westbound			Northbound			Southbound							
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT					
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

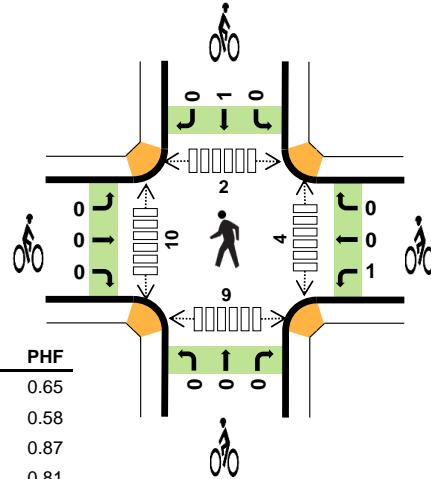
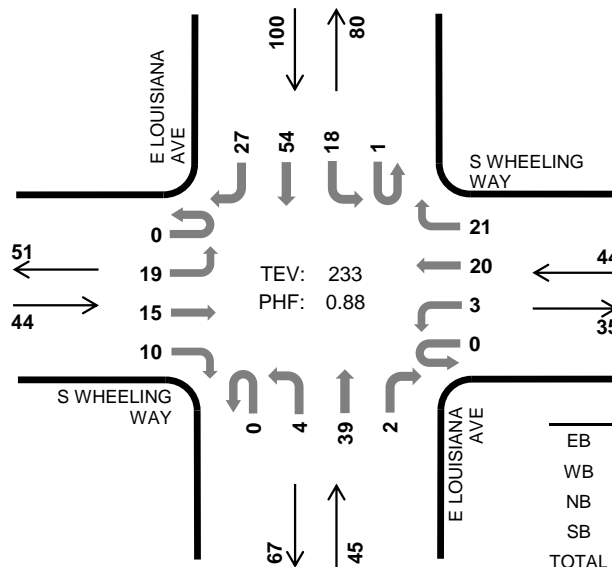
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

E LOUISIANA AVE S WHEELING WAY



Peak Hour

Date: 04/27/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	4.5%	0.65
WB	6.8%	0.58
NB	0.0%	0.87
SB	2.0%	0.81
TOTAL	3.0%	0.88

Two-Hour Count Summaries

Interval Start		S WHEELING WAY				S WHEELING WAY				E LOUISIANA AVE				E LOUISIANA AVE				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	4	5	1	0	1	7	8	0	1	11	1	0	1	8	7	55	0
4:15 PM		0	7	3	2	0	1	3	5	0	1	6	1	0	8	10	4	51	0
4:30 PM		0	5	3	4	0	3	5	8	0	0	11	1	0	11	17	8	76	0
4:45 PM		0	3	2	1	0	2	3	5	0	2	5	2	0	4	9	7	45	227
5:00 PM		0	1	5	1	0	2	8	9	0	1	10	0	0	5	9	8	59	231
5:15 PM		0	1	3	1	0	0	7	2	0	1	11	0	0	3	12	6	47	227
5:30 PM		0	10	3	4	0	0	5	4	0	0	7	2	0	6	18	7	66	217
5:45 PM		0	7	4	4	0	1	0	6	0	2	11	0	1	4	15	6	61	233
Count Total		0	38	28	18	0	10	38	47	0	8	72	7	1	42	98	53	460	0
Peak Hour	All	0	19	15	10	0	3	20	21	0	4	39	2	1	18	54	27	233	0
	HV	0	0	2	0	0	0	3	0	0	0	0	0	0	0	2	0	7	0
	HV%	-	0%	13%	0%	-	0%	15%	0%	-	0%	0%	0%	0%	0%	4%	0%	3%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	1	1	0	2	0	0	0	0	0	0	0	1	2	3
4:15 PM	2	0	0	0	2	0	0	0	0	0	1	0	1	1	3
4:30 PM	2	0	1	1	4	0	1	0	0	1	0	0	1	0	1
4:45 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	1	1
5:00 PM	1	2	0	0	3	0	0	0	1	1	1	2	1	1	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
5:30 PM	1	1	0	1	3	0	1	0	0	1	1	7	1	6	15
5:45 PM	0	0	0	1	1	0	0	0	0	0	2	1	0	1	4
Count Total	6	4	4	3	17	0	2	0	1	3	5	10	5	13	33
Peak Hour	2	3	0	2	7	0	1	0	1	2	4	10	2	9	25

Two-Hour Count Summaries - Heavy Vehicles																			
Interval Start	S WHEELING WAY				S WHEELING WAY				E LOUISIANA AVE				E LOUISIANA AVE				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2	0
4:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
4:30 PM	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	0	4	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	10
5:00 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	11
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
5:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3	8
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	7
Count Total	0	2	4	0	0	0	4	0	0	1	2	1	0	0	2	1	0	17	0
Peak Hour	0	0	2	0	0	0	3	0	0	0	0	0	0	0	2	0	0	7	0

Two-Hour Count Summaries - Bikes																	
Interval Start	S WHEELING WAY			S WHEELING WAY			E LOUISIANA AVE			E LOUISIANA AVE			15-min Total	Rolling One Hour			
	Eastbound			Westbound			Northbound			Southbound							
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT					
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
5:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Count Total	0	0	0	1	1	0	0	0	0	0	1	0	0	3	0	0	
Peak Hour	0	0	0	1	0	0	0	0	0	0	1	0	0	2	0	0	

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S POTOMAC ST E ARKANSAS DR

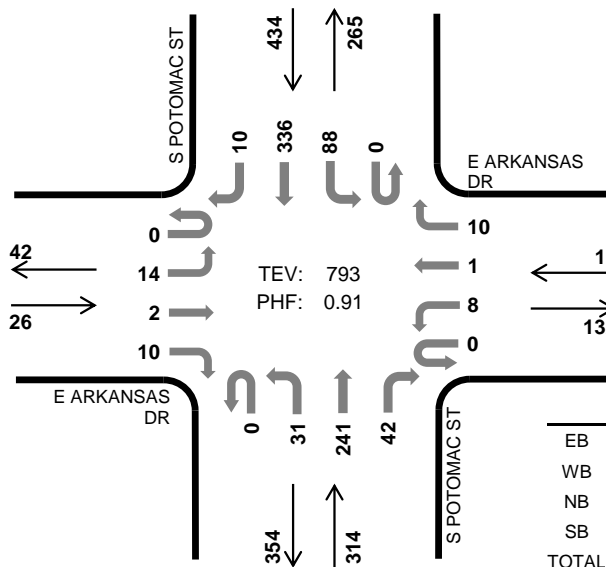


Peak Hour

Date: 04/27/2022

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	0.0%	0.65
WB	0.0%	0.68
NB	1.3%	0.88
SB	1.8%	0.90
TOTAL	1.5%	0.91

Two-Hour Count Summaries

Interval Start		E ARKANSAS DR				E ARKANSAS DR				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	0	0	0	0	0	0	0	2	42	6	0	13	39	4	106	0
7:15 AM		0	2	0	3	0	0	0	3	0	5	60	5	0	17	52	6	153	0
7:30 AM		0	1	0	4	0	0	0	1	0	3	56	6	0	9	52	1	133	0
7:45 AM		0	3	0	4	0	3	0	3	0	8	67	14	0	19	96	0	217	609
8:00 AM		0	3	0	2	0	1	0	2	0	11	51	8	0	21	94	6	199	702
8:15 AM		0	3	1	0	0	1	0	2	0	7	71	8	0	28	78	3	202	751
8:30 AM		0	5	1	4	0	3	1	3	0	5	52	12	0	20	68	1	175	793
8:45 AM		1	5	3	2	0	2	1	7	0	7	68	13	0	10	70	3	192	768
Count Total		1	22	5	19	0	10	2	21	0	48	467	72	0	137	549	24	1,377	0
Peak Hour	All	0	14	2	10	0	8	1	10	0	31	241	42	0	88	336	10	793	0
	HV	0	0	0	0	0	0	0	0	0	0	4	0	0	1	7	0	12	0
	HV%	-	0%	0%	0%	-	0%	0%	0%	-	0%	2%	0%	-	1%	2%	0%	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	1	1	2	0	0	0	0	0	1	1	0	3	5
7:15 AM	0	0	2	0	2	0	0	0	0	0	2	4	0	3	9
7:30 AM	0	0	0	1	1	0	0	0	0	0	1	0	3	2	6
7:45 AM	0	0	1	0	1	0	0	0	0	0	0	0	1	2	3
8:00 AM	0	0	1	1	2	0	0	0	0	0	1	0	0	3	4
8:15 AM	0	0	0	4	4	0	0	0	0	0	2	0	0	3	5
8:30 AM	0	0	2	3	5	0	0	0	0	0	4	0	2	3	9
8:45 AM	1	0	2	1	4	0	0	0	0	0	0	1	1	3	5
Count Total	1	0	9	11	21	0	0	0	0	0	11	6	7	22	46
Peak Hour	0	0	4	8	12	0	0	0	0	0	7	0	3	11	21

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	E ARKANSAS DR				E ARKANSAS DR				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	6
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	8
8:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	1	2	0	5	12
8:45 AM	0	1	0	0	0	0	0	0	0	0	1	1	0	0	1	0	4	15
Count Total	0	1	0	0	0	0	0	0	0	0	8	1	0	1	10	0	21	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	4	0	0	1	7	0	12	0

Two-Hour Count Summaries - Bikes																		
Interval Start	E ARKANSAS DR				E ARKANSAS DR				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT			
7:00 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
7:15 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
7:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
7:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
8:00 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
8:15 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
8:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
8:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
Count Total	0	0	0		0	0	0		0	0	0		0	0	0		0	0
Peak Hour	0	0	0		0	0	0		0	0	0		0	0	0		0	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S POTOMAC ST E ARKANSAS DR

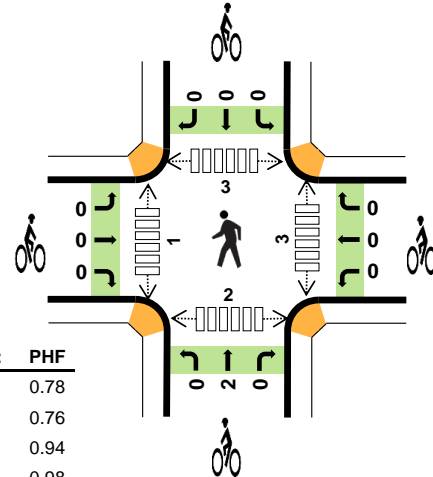
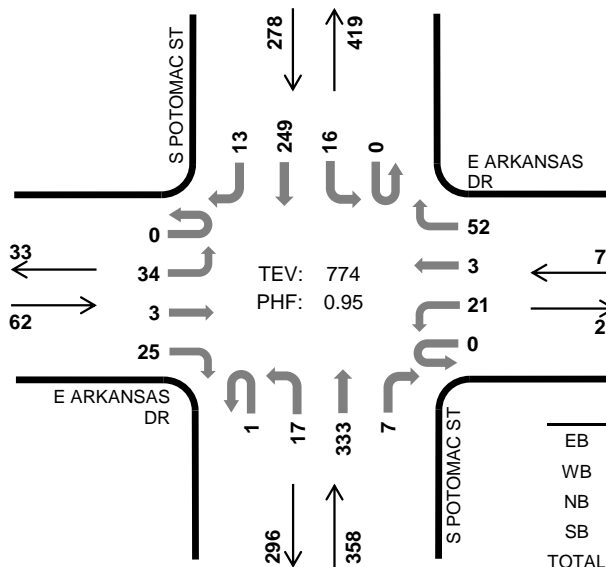


Peak Hour

Date: 04/27/2022

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	1.6%	0.78
WB	0.0%	0.76
NB	2.0%	0.94
SB	1.4%	0.98
TOTAL	1.6%	0.95

Two-Hour Count Summaries

Interval Start		E ARKANSAS DR				E ARKANSAS DR				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	5	1	5	0	8	1	13	0	6	66	4	0	2	68	2	181	0
4:15 PM		0	8	2	4	0	6	2	10	1	3	88	3	0	5	61	3	196	0
4:30 PM		0	9	0	11	0	5	0	15	0	5	72	1	0	4	62	4	188	0
4:45 PM		0	5	0	5	0	5	0	8	0	3	88	1	0	4	66	1	186	751
5:00 PM		0	12	1	5	0	5	1	19	0	6	85	2	0	3	60	5	204	774
5:15 PM		0	5	0	4	0	2	0	12	0	3	68	2	0	1	57	3	157	735
5:30 PM		0	4	0	3	0	5	0	7	0	6	66	0	0	1	73	2	167	714
5:45 PM		0	8	0	4	0	2	0	2	0	3	66	1	0	1	43	2	132	660
Count Total		0	56	4	41	0	38	4	86	1	35	599	14	0	21	490	22	1,411	0
Peak Hour	All	0	34	3	25	0	21	3	52	1	17	333	7	0	16	249	13	774	0
	HV	0	1	0	0	0	0	0	0	0	0	6	1	0	0	4	0	12	0
	HV%	-	3%	0%	0%	-	0%	0%	0%	0%	0%	2%	14%	-	0%	2%	0%	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	0	1	2	0	0	0	0	0	1	1	2	1	5
4:15 PM	0	0	4	1	5	0	0	0	0	0	0	0	1	1	2
4:30 PM	0	0	0	0	0	0	0	1	0	1	1	1	0	1	3
4:45 PM	1	0	2	2	5	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	1	1	2	0	0	1	0	1	2	0	2	0	4
5:15 PM	0	0	3	3	6	0	0	0	0	0	4	1	1	0	6
5:30 PM	0	0	2	2	4	0	0	0	0	0	1	0	0	3	4
5:45 PM	1	0	2	1	4	0	0	0	0	0	2	0	0	3	5
Count Total	3	0	14	11	28	0	0	2	0	2	11	3	6	9	29
Peak Hour	1	0	7	4	12	0	0	2	0	2	3	1	3	2	9

Two-Hour Count Summaries - Heavy Vehicles																			
Interval Start	E ARKANSAS DR				E ARKANSAS DR				S POTOMAC ST				S POTOMAC ST				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	1	0	5	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	5	12
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	12
5:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	6	13
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	4	17
5:45 PM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	4	16
Count Total	0	2	0	1	0	0	0	0	0	0	13	1	0	0	0	11	0	28	0
Peak Hour	0	1	0	0	0	0	0	0	0	0	6	1	0	0	0	4	0	12	0























Two-Hour Count Summaries - Bikes																		
Interval Start	E ARKANSAS DR			E ARKANSAS DR			S POTOMAC ST			S POTOMAC ST			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0			
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2			
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2			
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
Count Total	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0			
Peak Hour	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0			

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Intersection Capacity Worksheets:
2022 Existing

Timings
05/17/2022

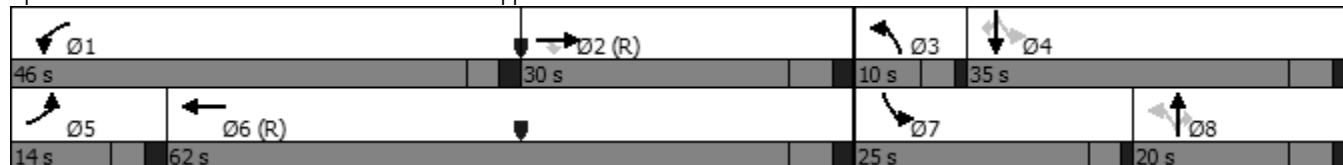
1: Potomac Street & Mississippi Avenue
2022 Existing - AM Peak Hour












											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	29	1143	130	784	1674	66	68	313	158	101	73
Future Volume (vph)	29	1143	130	784	1674	66	68	313	158	101	73
Turn Type	Prot	NA	Perm	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6	3	8		7	4	
Permitted Phases			2			8		8	4		4
Detector Phase	5	2	2	1	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	3.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)	9.5	29.0	29.0	9.5	24.0	9.5	38.0	38.0	9.5	34.0	34.0
Total Split (s)	14.0	30.0	30.0	46.0	62.0	10.0	20.0	20.0	25.0	35.0	35.0
Total Split (%)	11.6%	24.8%	24.8%	38.0%	51.2%	8.3%	16.5%	16.5%	20.7%	28.9%	28.9%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None
Act Effect Green (s)	6.4	41.3	41.3	33.9	72.7	17.6	9.8	9.8	30.8	20.8	20.8
Actuated g/C Ratio	0.05	0.34	0.34	0.28	0.60	0.15	0.08	0.08	0.25	0.17	0.17
v/c Ratio	0.38	0.78	0.24	0.88	0.62	0.38	0.54	0.66	0.49	0.34	0.20

Intersection Summary

Cycle Length: 121
 Actuated Cycle Length: 121
 Offset: 95 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Green
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 31.6
 Intersection Capacity Utilization 74.3%
 Analysis Period (min) 15

Splits and Phases: 1: Potomac Street & Mississippi Avenue



											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	35	1361	155	834	1860	80	82	377	170	109	78
v/c Ratio	0.38	0.78	0.24	0.88	0.62	0.38	0.54	0.66	0.49	0.34	0.20
Control Delay	65.9	41.4	3.7	52.2	18.9	39.8	65.6	11.0	40.7	46.0	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.9	41.4	3.7	52.2	18.9	39.8	65.6	11.0	40.7	46.0	1.1
Queue Length 50th (ft)	27	347	0	320	343	49	63	0	110	78	0
Queue Length 95th (ft)	57	#539	23	369	508	74	102	32	155	121	0
Internal Link Dist (ft)		1218			819		404			347	
Turn Bay Length (ft)	135		430	400		160		200	50		50
Base Capacity (vph)	131	1736	655	1152	3004	214	218	655	387	450	494
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.78	0.24	0.72	0.62	0.37	0.38	0.58	0.44	0.24	0.16

Intersection Summary































95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

05/17/2022

1: Potomac Street & Mississippi Avenue

2022 Existing - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  				 		 	
Traffic Volume (veh/h)	29	1143	130	784	1674	74	66	68	313	158	101	73
Future Volume (veh/h)	29	1143	130	784	1674	74	66	68	313	158	101	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	35	1361	0	834	1781	79	80	82	0	170	109	78
Peak Hour Factor	0.84	0.84	0.84	0.94	0.94	0.94	0.83	0.83	0.83	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	44	2026		897	3149	140	225	123		274	223	188
Arrive On Green	0.02	0.40	0.00	0.26	0.63	0.63	0.05	0.07	0.00	0.10	0.12	0.12
Sat Flow, veh/h	1781	5106	1585	3428	4971	220	1795	1885	2812	1795	1885	1585
Grp Volume(v), veh/h	35	1361	0	834	1209	651	80	82	0	170	109	78
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1714	1689	1815	1795	1885	1406	1795	1885	1585
Q Serve(g_s), s	2.4	26.5	0.0	28.7	24.7	24.8	5.0	5.1	0.0	10.3	6.5	5.5
Cycle Q Clear(g_c), s	2.4	26.5	0.0	28.7	24.7	24.8	5.0	5.1	0.0	10.3	6.5	5.5
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	44	2026		897	2139	1149	225	123		274	223	188
V/C Ratio(X)	0.79	0.67		0.93	0.57	0.57	0.36	0.67		0.62	0.49	0.42
Avail Cap(c_a), veh/h	132	2026		1162	2139	1149	225	218		401	452	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	30.0	0.0	43.6	12.7	12.7	49.6	55.3	0.0	44.7	49.9	49.4
Incr Delay (d2), s/veh	10.7	1.8	0.0	9.8	1.1	2.0	0.4	2.3	0.0	0.9	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	10.8	0.0	13.0	8.8	9.8	2.3	2.5	0.0	4.7	3.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.4	31.8	0.0	53.4	13.8	14.7	50.0	57.6	0.0	45.5	50.5	50.0
LnGrp LOS	E	C		D	B	B	D	E		D	D	D
Approach Vol, veh/h		1396			2694			162			357	
Approach Delay, s/veh		32.8			26.2			53.8			48.0	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	36.7	54.0	10.0	20.3	8.0	82.6	16.4	13.9				
Change Period (Y+Rc), s	5.0	6.0	4.0	6.0	5.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	41.0	24.0	6.0	29.0	9.0	56.0	21.0	14.0				
Max Q Clear Time (g_c+I1), s	30.7	28.5	7.0	8.5	4.4	26.8	12.3	7.1				
Green Ext Time (p_c), s	0.9	0.0	0.0	0.5	0.0	16.0	0.2	0.1				

Intersection Summary

HCM 6th Ctrl Delay 30.9
 HCM 6th LOS C

Notes















User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
05/17/2022

2: Potomac Street & Louisiana Avenue





2022 Existing - AM Peak Hour







								
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Configurations								
Traffic Volume (vph)	97	0	22	3	1	11	315	747
Future Volume (vph)	97	0	22	3	1	11	315	747
Turn Type	Perm	NA	Perm	Perm	NA	Perm	NA	NA
Protected Phases		4			8		2	6
Permitted Phases	4		4	8		2		
Detector Phase	4	4	4	8	8	2	2	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	23.0	23.0	23.0	24.0	24.0	18.0	18.0	22.0
Total Split (s)	33.0	33.0	33.0	21.0	21.0	78.0	78.0	78.0
Total Split (%)	25.0%	25.0%	25.0%	15.9%	15.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	6.0	6.0	6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)		14.6	14.6		6.2	101.5	101.5	101.5
Actuated g/C Ratio		0.11	0.11		0.05	0.77	0.77	0.77
v/c Ratio		0.70	0.11		0.14	0.04	0.24	0.68

Intersection Summary

Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 38 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 17.3
 Intersection Capacity Utilization 67.1%
 Analysis Period (min) 15

Splits and Phases: 2: Potomac Street & Louisiana Avenue




















 Ø2 (R)	 Ø4	 Ø8
78 s	33 s	21 s
 Ø6 (R)		
78 s		





						
Lane Group	EBT	EBR	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	104	24	12	12	350	957
v/c Ratio	0.70	0.11	0.14	0.04	0.24	0.68
Control Delay	79.8	1.0	63.0	6.8	6.2	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	1.7
Total Delay	79.8	1.0	63.0	6.8	6.2	14.6
Queue Length 50th (ft)	87	0	10	2	59	271
Queue Length 95th (ft)	144	0	12	11	165	668
Internal Link Dist (ft)	715		260		100	235
Turn Bay Length (ft)				40		
Base Capacity (vph)	285	375	230	306	1446	1409
Starvation Cap Reductn	0	0	0	0	0	279
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.06	0.05	0.04	0.24	0.85
Intersection Summary						

HCM 6th Signalized Intersection Summary

2: Potomac Street & Louisiana Avenue

2022 Existing - AM Peak Hour









												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	0	22	3	1	0	11	315	0	0	747	76
Future Volume (veh/h)	97	0	22	3	1	0	11	315	0	0	747	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1900	1900	1900	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	104	0	24	9	3	0	12	350	0	0	869	88
Peak Hour Factor	0.93	0.93	0.93	0.33	0.33	0.33	0.90	0.90	0.90	0.86	0.86	0.86
Percent Heavy Veh, %	6	6	6	0	0	0	1	1	1	2	2	2
Cap, veh/h	188	0	146	74	18	0	423	1545	0	55	1369	139
Arrive On Green	0.10	0.00	0.10	0.10	0.10	0.00	0.82	0.82	0.00	0.00	0.82	0.82
Sat Flow, veh/h	1374	0	1503	270	189	0	591	1885	0	1031	1670	169
Grp Volume(v), veh/h	104	0	24	12	0	0	12	350	0	0	0	957
Grp Sat Flow(s),veh/h/ln	1374	0	1503	459	0	0	591	1885	0	1031	0	1839
Q Serve(g_s), s	0.0	0.0	1.9	0.2	0.0	0.0	1.0	5.4	0.0	0.0	0.0	25.8
Cycle Q Clear(g_c), s	9.7	0.0	1.9	9.9	0.0	0.0	26.9	5.4	0.0	0.0	0.0	25.8
Prop In Lane	1.00		1.00	0.75		0.00	1.00		0.00	1.00		0.09
Lane Grp Cap(c), veh/h	188	0	146	92	0	0	423	1545	0	55	0	1507
V/C Ratio(X)	0.55	0.00	0.16	0.13	0.00	0.00	0.03	0.23	0.00	0.00	0.00	0.63
Avail Cap(c_a), veh/h	344	0	319	128	0	0	423	1545	0	55	0	1507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	58.2	0.0	54.7	55.4	0.0	0.0	9.5	2.6	0.0	0.0	0.0	4.5
Incr Delay (d2), s/veh	0.9	0.0	0.2	0.5	0.0	0.0	0.1	0.3	0.0	0.0	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.7	0.4	0.0	0.0	0.1	1.8	0.0	0.0	0.0	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.1	0.0	54.9	55.9	0.0	0.0	9.7	3.0	0.0	0.0	0.0	6.5
LnGrp LOS	E	A	D	E	A	A	A	A	A	A	A	A
Approach Vol, veh/h	128			12			362			957		
Approach Delay, s/veh	58.3			55.9			3.2			6.5		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	114.2			17.8			114.2			17.8		
Change Period (Y+Rc), s	6.0			5.0			6.0			5.0		
Max Green Setting (Gmax), s	72.0			28.0			72.0			16.0		
Max Q Clear Time (g_c+I1), s	28.9			11.7			27.8			11.9		
Green Ext Time (p_c), s	5.0			0.3			20.8			0.0		
Intersection Summary												
HCM 6th Ctrl Delay	10.7											
HCM 6th LOS	B											

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	1	325	4	0	772
Future Vol, veh/h	4	1	325	4	0	772
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	30	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	91	91	89	89
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	6	2	357	4	0	867

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1229	362	0
Stage 1	362	-	-
Stage 2	867	-	-
Critical Hdwy	6.41	6.21	-
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.509	3.309	-
Pot Cap-1 Maneuver	197	685	-
Stage 1	707	-	-
Stage 2	413	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	196	683	-
Mov Cap-2 Maneuver	318	-	-
Stage 1	705	-	-
Stage 2	413	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	356	1192
HCM Lane V/C Ratio	-	-	0.022	-
HCM Control Delay (s)	-	-	15.3	0
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	2	10	8	1	10	31	241	42	88	336	10
Future Vol, veh/h	14	2	10	8	1	10	31	241	42	88	336	10
Conflicting Peds, #/hr	11	0	3	3	0	11	0	0	7	7	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	40	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	68	80	68	88	88	88	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	2	2	2
Mvmt Flow	22	3	15	12	1	15	35	274	48	98	373	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	962	974	382	962	955	316	384	0	0	329	0	0
Stage 1	575	575	-	375	375	-	-	-	-	-	-	-
Stage 2	387	399	-	587	580	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	237	254	670	237	260	729	1180	-	-	1231	-	-
Stage 1	507	506	-	650	621	-	-	-	-	-	-	-
Stage 2	641	606	-	499	503	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	210	225	668	208	230	717	1180	-	-	1223	-	-
Mov Cap-2 Maneuver	210	225	-	208	230	-	-	-	-	-	-	-
Stage 1	492	466	-	627	598	-	-	-	-	-	-	-
Stage 2	602	584	-	444	463	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	18.7		16.2		0.8		1.7	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1180	-	-	210	503	208	615	1223	-	-
HCM Lane V/C Ratio	0.03	-	-	0.103	0.037	0.057	0.026	0.08	-	-
HCM Control Delay (s)	8.1	-	-	24.1	12.4	23.3	11	8.2	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0.2	0.1	0.3	-	-

Intersection

Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	34	26	5	2	21	29	7	61	3	20	14	18
Future Vol, veh/h	34	26	5	2	21	29	7	61	3	20	14	18
Peak Hour Factor	0.77	0.77	0.77	0.93	0.93	0.93	0.71	0.71	0.71	0.62	0.62	0.62
Heavy Vehicles, %	6	6	6	8	8	8	0	0	0	10	10	10
Mvmt Flow	44	34	6	2	23	31	10	86	4	32	23	29
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0





























Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	7.5	7.9	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	52%	4%	38%
Vol Thru, %	86%	40%	40%	27%
Vol Right, %	4%	8%	56%	35%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	71	65	52	52
LT Vol	7	34	2	20
Through Vol	61	26	21	14
RT Vol	3	5	29	18
Lane Flow Rate	100	84	56	84
Geometry Grp	1	1	1	1
Degree of Util (X)	0.12	0.106	0.066	0.102
Departure Headway (Hd)	4.309	4.537	4.221	4.371
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	835	793	851	823
Service Time	2.32	2.55	2.235	2.381
HCM Lane V/C Ratio	0.12	0.106	0.066	0.102
HCM Control Delay	7.9	8.1	7.5	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.4	0.2	0.3

Timings
05/17/2022

1: Potomac Street & Mississippi Avenue













2022 Existing - PM Peak Hour












											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  			 			
Traffic Volume (vph)	38	1651	75	301	1526	108	92	558	202	150	96
Future Volume (vph)	38	1651	75	301	1526	108	92	558	202	150	96
Turn Type	Prot	NA	Perm	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6	3	8		7	4	5
Permitted Phases			2			8		8	4		4
Detector Phase	5	2	2	1	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	3.0	5.0	5.0	3.0	5.0	4.0
Minimum Split (s)	9.5	29.0	29.0	9.5	24.0	9.5	38.0	38.0	9.5	34.0	9.5
Total Split (s)	14.0	47.0	47.0	26.0	59.0	23.0	26.0	26.0	23.0	26.0	14.0
Total Split (%)	11.5%	38.5%	38.5%	21.3%	48.4%	18.9%	21.3%	21.3%	18.9%	21.3%	11.5%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	4.0	6.0	6.0	4.0	6.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None
Act Effect Green (s)	6.7	56.1	56.1	15.1	64.6	25.1	12.8	12.8	35.7	19.4	27.1
Actuated g/C Ratio	0.05	0.46	0.46	0.12	0.53	0.21	0.10	0.10	0.29	0.16	0.22
v/c Ratio	0.43	0.78	0.10	0.75	0.64	0.41	0.54	0.82	0.61	0.60	0.51

Intersection Summary

Cycle Length: 122
 Actuated Cycle Length: 122
 Offset: 45 (37%), Referenced to phase 2:EBT and 6:WBT, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 30.4
 Intersection Capacity Utilization 76.9%
 Analysis Period (min) 15

Splits and Phases: 1: Potomac Street & Mississippi Avenue

					
Ø1	Ø2 (R)		Ø3	Ø4	
26 s	47 s		23 s	26 s	
					
Ø5	Ø6 (R)		Ø7	Ø8	
14 s	59 s		23 s	26 s	

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	42	1814	82	317	1702	123	105	634	240	179	240
v/c Ratio	0.43	0.78	0.10	0.75	0.64	0.41	0.54	0.82	0.61	0.60	0.51
Control Delay	68.9	32.2	0.3	62.5	23.2	35.8	60.5	17.9	41.1	55.4	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.9	32.2	0.3	62.5	23.2	35.8	60.5	17.9	41.1	55.4	16.0
Queue Length 50th (ft)	33	434	0	126	339	73	80	39	153	132	51
Queue Length 95th (ft)	70	#654	0	169	472	108	127	94	191	182	0
Internal Link Dist (ft)		1218			819		404			347	
Turn Bay Length (ft)	135		430	400		160		200	50		50
Base Capacity (vph)	130	2340	788	590	2665	419	308	906	405	331	500
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.78	0.10	0.54	0.64	0.29	0.34	0.70	0.59	0.54	0.48

Intersection Summary































95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

05/17/2022

1: Potomac Street & Mississippi Avenue

2022 Existing - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  				 		 	
Traffic Volume (veh/h)	38	1651	75	301	1526	91	108	92	558	202	150	96
Future Volume (veh/h)	38	1651	75	301	1526	91	108	92	558	202	150	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	42	1814	0	317	1606	96	123	105	0	240	179	240
Peak Hour Factor	0.91	0.91	0.91	0.95	0.95	0.95	0.88	0.88	0.88	0.84	0.84	0.40
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	54	2461		375	2758	165	267	198		364	304	304
Arrive On Green	0.03	0.48	0.00	0.11	0.56	0.56	0.08	0.10	0.00	0.13	0.16	0.16
Sat Flow, veh/h	1781	5106	1585	3456	4924	294	1795	1885	2812	1795	1885	1586
Grp Volume(v), veh/h	42	1814	0	317	1110	592	123	105	0	240	179	240
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1814	1795	1885	1406	1795	1885	1586
Q Serve(g_s), s	2.9	34.8	0.0	11.0	26.0	26.0	7.3	6.4	0.0	14.0	10.7	17.6
Cycle Q Clear(g_c), s	2.9	34.8	0.0	11.0	26.0	26.0	7.3	6.4	0.0	14.0	10.7	17.6
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	54	2461		375	1907	1016	267	198		364	304	304
V/C Ratio(X)	0.78	0.74		0.84	0.58	0.58	0.46	0.53		0.66	0.59	0.79
Avail Cap(c_a), veh/h	131	2461		595	1907	1016	410	309		406	309	308
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	25.4	0.0	53.4	17.5	17.5	44.0	51.7	0.0	39.6	47.4	47.0
Incr Delay (d2), s/veh	8.7	2.0	0.0	3.5	1.3	2.4	0.5	0.8	0.0	2.3	1.9	11.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	13.8	0.0	4.9	9.9	10.9	3.3	3.1	0.0	6.5	5.3	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.4	27.4	0.0	56.9	18.8	20.0	44.5	52.6	0.0	41.9	49.3	58.6
LnGrp LOS	E	C		E	B	B	D	D		D	D	E
Approach Vol, veh/h		1856			2019			228			659	
Approach Delay, s/veh		28.3			25.1			48.2			50.0	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.2	64.8	13.3	25.7	8.7	74.3	20.2	18.8				
Change Period (Y+Rc), s	5.0	6.0	4.0	6.0	5.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	21.0	41.0	19.0	20.0	9.0	53.0	19.0	20.0				
Max Q Clear Time (g_c+I1), s	13.0	36.8	9.3	19.6	4.9	28.0	16.0	8.4				
Green Ext Time (p_c), s	0.3	3.5	0.1	0.1	0.0	13.1	0.1	0.2				

Intersection Summary

HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

Notes














User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
05/17/2022

2: Potomac Street & Louisiana Avenue





2022 Existing - PM Peak Hour







							
Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	97	0	7	0	12	671	315
Future Volume (vph)	97	0	7	0	12	671	315
Turn Type	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases		4		8		2	6
Permitted Phases	4		4		2		
Detector Phase	4	4	4	8	2	2	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	23.0	23.0	23.0	24.0	18.0	18.0	22.0
Total Split (s)	33.0	33.0	33.0	21.0	78.0	78.0	78.0
Total Split (%)	25.0%	25.0%	25.0%	15.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	6.0	6.0	6.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)		45.4	45.4	5.0	73.6	73.6	73.6
Actuated g/C Ratio		0.34	0.34	0.04	0.56	0.56	0.56
v/c Ratio		2.20	0.02	0.03	0.03	0.78	0.43

Intersection Summary

Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 38 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.20
 Intersection Signal Delay: 76.9
 Intersection Capacity Utilization 56.9%
 Analysis Period (min) 15

Splits and Phases: 2: Potomac Street & Louisiana Avenue

 Ø2 (R)	 Ø4	 Ø8
78 s	33 s	21 s
 Ø6 (R)		
78 s		




















						
Lane Group	EBT	EBR	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	123	9	8	14	810	429
v/c Ratio	2.20	0.02	0.03	0.03	0.78	0.43
Control Delay	622.8	0.0	0.0	11.7	28.5	17.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	622.8	0.0	0.0	11.7	28.5	17.1
Queue Length 50th (ft)	~167	0	0	5	521	195
Queue Length 95th (ft)	#251	0	0	12	493	226
Internal Link Dist (ft)	715		260		100	235
Turn Bay Length (ft)				40		
Base Capacity (vph)	56	570	416	434	1055	1020
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	2.20	0.02	0.02	0.03	0.77	0.42
Intersection Summary						
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.						
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.						





HCM 6th Signalized Intersection Summary

2: Potomac Street & Louisiana Avenue

05/17/2022

2022 Existing - PM Peak Hour









												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	0	7	0	0	2	12	671	2	0	315	92
Future Volume (veh/h)	97	0	7	0	0	2	12	671	2	0	315	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	123	0	9	0	0	8	14	808	2	0	332	97
Peak Hour Factor	0.79	0.79	0.79	0.25	0.25	0.25	0.83	0.83	0.83	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	0	0	2	2	2	2	2	2
Cap, veh/h	203	0	173	0	0	177	768	1503	4	55	1119	327
Arrive On Green	0.11	0.00	0.11	0.00	0.00	0.11	0.81	0.81	0.81	0.00	0.81	0.81
Sat Flow, veh/h	1340	0	1564	0	0	1597	958	1865	5	673	1389	406
Grp Volume(v), veh/h	123	0	9	0	0	8	14	0	810	0	0	429
Grp Sat Flow(s),veh/h/ln	1340	0	1564	0	0	1597	958	0	1869	673	0	1795
Q Serve(g_s), s	11.4	0.0	0.7	0.0	0.0	0.6	0.5	0.0	19.6	0.0	0.0	8.1
Cycle Q Clear(g_c), s	12.0	0.0	0.7	0.0	0.0	0.6	8.6	0.0	19.6	0.0	0.0	8.1
Prop In Lane	1.00		1.00	0.00		1.00	1.00		0.00	1.00		0.23
Lane Grp Cap(c), veh/h	203	0	173	0	0	177	768	0	1506	55	0	1446
V/C Ratio(X)	0.61	0.00	0.05	0.00	0.00	0.05	0.02	0.00	0.54	0.00	0.00	0.30
Avail Cap(c_a), veh/h	344	0	332	0	0	194	768	0	1506	55	0	1446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	57.8	0.0	52.5	0.0	0.0	52.4	4.4	0.0	4.4	0.0	0.0	3.3
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	1.4	0.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	0.3	0.0	0.0	0.2	0.1	0.0	6.6	0.0	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.9	0.0	52.5	0.0	0.0	52.5	4.4	0.0	5.8	0.0	0.0	3.8
LnGrp LOS	E	A	D	A	A	D	A	A	A	A	A	A
Approach Vol, veh/h		132			8			824			429	
Approach Delay, s/veh		58.4			52.5			5.8			3.8	
Approach LOS		E			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		112.4		19.6		112.4		19.6				
Change Period (Y+Rc), s		6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s		72.0		28.0		72.0		16.0				
Max Q Clear Time (g_c+I1), s		21.6		14.0		10.1		2.6				
Green Ext Time (p_c), s		16.5		0.3		6.6		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			10.4									
HCM 6th LOS			B									
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	685	0	0	322
Future Vol, veh/h	0	0	685	0	0	322
Conflicting Peds, #/hr	1	1	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	30	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	25	25	82	82	89	89
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	0	0	835	0	0	362

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1209	847	0	0	846	0
Stage 1	846	-	-	-	-	-
Stage 2	363	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.13	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.227	-
Pot Cap-1 Maneuver	204	365	-	-	787	-
Stage 1	424	-	-	-	-	-
Stage 2	708	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	202	361	-	-	779	-
Mov Cap-2 Maneuver	323	-	-	-	-	-
Stage 1	420	-	-	-	-	-
Stage 2	707	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	779
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	3	25	21	3	52	18	333	7	16	249	13
Future Vol, veh/h	34	3	25	21	3	52	18	333	7	16	249	13
Conflicting Peds, #/hr	3	0	2	2	0	3	1	0	3	3	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	40	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	76	76	76	94	94	94	98	98	98
Heavy Vehicles, %	2	2	2	0	0	0	2	2	2	1	1	1
Mvmt Flow	44	4	32	28	4	68	19	354	7	16	254	13

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	729	696	264	712	699	364	268	0	0	364	0	0
Stage 1	294	294	-	399	399	-	-	-	-	-	-	-
Stage 2	435	402	-	313	300	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.5	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	338	365	775	350	366	685	1296	-	-	1200	-	-
Stage 1	714	670	-	631	606	-	-	-	-	-	-	-
Stage 2	600	600	-	702	669	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	294	353	773	324	354	681	1295	-	-	1197	-	-
Mov Cap-2 Maneuver	294	353	-	324	354	-	-	-	-	-	-	-
Stage 1	703	661	-	620	595	-	-	-	-	-	-	-
Stage 2	527	589	-	659	660	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	15.4		12.9		0.4		0.5	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1295	-	-	294	686	324	648	1197	-	-
HCM Lane V/C Ratio	0.015	-	-	0.148	0.052	0.085	0.112	0.014	-	-
HCM Control Delay (s)	7.8	-	-	19.4	10.5	17.1	11.3	8	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.2	0.3	0.4	0	-	-























Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	15	10	3	20	21	4	39	2	19	54	27
Future Vol, veh/h	19	15	10	3	20	21	4	39	2	19	54	27
Peak Hour Factor	0.65	0.65	0.65	0.58	0.58	0.58	0.87	0.87	0.87	0.81	0.81	0.81
Heavy Vehicles, %	5	5	5	7	7	7	0	0	0	2	2	2
Mvmt Flow	29	23	15	5	34	36	5	45	2	23	67	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	7.6	7.6	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	43%	7%	19%
Vol Thru, %	87%	34%	45%	54%
Vol Right, %	4%	23%	48%	27%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	45	44	44	100
LT Vol	4	19	3	19
Through Vol	39	15	20	54
RT Vol	2	10	21	27
Lane Flow Rate	52	68	76	123
Geometry Grp	1	1	1	1
Degree of Util (X)	0.062	0.083	0.089	0.144
Departure Headway (Hd)	4.342	4.405	4.211	4.198
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	828	816	854	859
Service Time	2.355	2.416	2.22	2.198
HCM Lane V/C Ratio	0.063	0.083	0.089	0.143
HCM Control Delay	7.6	7.8	7.6	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.3	0.5

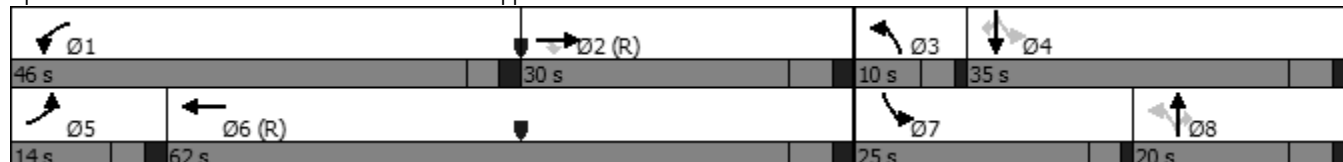
Intersection Capacity Worksheets: 2025 Background












											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	29	1177	132	796	1724	67	69	318	160	103	74
Future Volume (vph)	29	1177	132	796	1724	67	69	318	160	103	74
Turn Type	Prot	NA	Perm	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6	3	8		7	4	
Permitted Phases			2			8		8	4		4
Detector Phase	5	2	2	1	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	3.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)	9.5	29.0	29.0	9.5	24.0	9.5	38.0	38.0	9.5	34.0	34.0
Total Split (s)	14.0	30.0	30.0	46.0	62.0	10.0	20.0	20.0	25.0	35.0	35.0
Total Split (%)	11.6%	24.8%	24.8%	38.0%	51.2%	8.3%	16.5%	16.5%	20.7%	28.9%	28.9%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None
Act Effect Green (s)	6.4	40.8	40.8	34.3	72.6	17.6	9.8	9.8	30.9	20.9	20.9
Actuated g/C Ratio	0.05	0.34	0.34	0.28	0.60	0.15	0.08	0.08	0.26	0.17	0.17
v/c Ratio	0.38	0.82	0.24	0.88	0.64	0.38	0.55	0.66	0.50	0.34	0.20

Intersection Summary

Cycle Length: 121
 Actuated Cycle Length: 121
 Offset: 95 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Green
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 32.2
 Intersection Capacity Utilization 75.4%
 Analysis Period (min) 15

Splits and Phases: 1: Potomac Street & Mississippi Avenue



											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	35	1401	157	847	1917	81	83	383	172	111	80
v/c Ratio	0.38	0.82	0.24	0.88	0.64	0.38	0.55	0.66	0.50	0.34	0.20
Control Delay	65.9	42.9	3.9	52.1	19.4	39.9	65.9	11.0	40.7	46.0	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.9	42.9	3.9	52.1	19.4	39.9	65.9	11.0	40.7	46.0	1.1
Queue Length 50th (ft)	27	364	0	324	361	50	64	0	112	79	0
Queue Length 95th (ft)	57	#567	24	374	532	74	103	32	157	123	0
Internal Link Dist (ft)		1218			819		404			347	
Turn Bay Length (ft)	135		430	400		160		200	50		50
Base Capacity (vph)	131	1714	649	1152	3000	214	218	660	388	450	494
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.82	0.24	0.74	0.64	0.38	0.38	0.58	0.44	0.25	0.16
































Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

1: Potomac Street & Mississippi Avenue

2025 Background - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  				 	 	 	
Traffic Volume (veh/h)	29	1177	132	796	1724	78	67	69	318	160	103	74
Future Volume (veh/h)	29	1177	132	796	1724	78	67	69	318	160	103	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	35	1401	0	847	1834	83	81	83	0	172	111	80
Peak Hour Factor	0.84	0.84	0.84	0.94	0.94	0.94	0.83	0.83	0.83	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	44	1999		910	3139	142	226	124		276	226	190
Arrive On Green	0.02	0.39	0.00	0.27	0.63	0.63	0.05	0.07	0.00	0.10	0.12	0.12
Sat Flow, veh/h	1781	5106	1585	3428	4967	224	1795	1885	2812	1795	1885	1586
Grp Volume(v), veh/h	35	1401	0	847	1246	671	81	83	0	172	111	80
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1714	1689	1814	1795	1885	1406	1795	1885	1586
Q Serve(g_s), s	2.4	27.8	0.0	29.2	26.0	26.1	5.1	5.2	0.0	10.4	6.7	5.7
Cycle Q Clear(g_c), s	2.4	27.8	0.0	29.2	26.0	26.1	5.1	5.2	0.0	10.4	6.7	5.7
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	44	1999		910	2134	1146	226	124		276	226	190
V/C Ratio(X)	0.79	0.70		0.93	0.58	0.59	0.36	0.67		0.62	0.49	0.42
Avail Cap(c_a), veh/h	132	1999		1162	2134	1146	226	218		401	452	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	30.9	0.0	43.4	13.0	13.0	49.6	55.2	0.0	44.6	49.8	49.4
Incr Delay (d2), s/veh	10.7	2.1	0.0	10.1	1.2	2.2	0.4	2.3	0.0	0.9	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	11.4	0.0	13.3	9.3	10.3	2.3	2.6	0.0	4.8	3.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.4	32.9	0.0	53.5	14.2	15.2	49.9	57.6	0.0	45.4	50.4	49.9
LnGrp LOS	E	C		D	B	B	D	E		D	D	D
Approach Vol, veh/h		1436			2764			164			363	
Approach Delay, s/veh		33.8			26.5			53.8			47.9	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.1	53.4	10.0	20.5	8.0	82.5	16.5	14.0				
Change Period (Y+Rc), s	5.0	6.0	4.0	6.0	5.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	41.0	24.0	6.0	29.0	9.0	56.0	21.0	14.0				
Max Q Clear Time (g_c+I1), s	31.2	29.8	7.1	8.7	4.4	28.1	12.4	7.2				
Green Ext Time (p_c), s	0.9	0.0	0.0	0.5	0.0	16.2	0.2	0.1				

Intersection Summary

HCM 6th Ctrl Delay	31.3
HCM 6th LOS	C















Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
05/17/2022





2: Potomac Street & Louisiana Avenue
2025 Background - AM Peak Hour







								
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Configurations								
Traffic Volume (vph)	98	0	22	3	1	11	320	758
Future Volume (vph)	98	0	22	3	1	11	320	758
Turn Type	Perm	NA	Perm	Perm	NA	Perm	NA	NA
Protected Phases		4			8		2	6
Permitted Phases	4		4	8		2		
Detector Phase	4	4	4	8	8	2	2	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	23.0	23.0	23.0	24.0	24.0	18.0	18.0	22.0
Total Split (s)	33.0	33.0	33.0	21.0	21.0	78.0	78.0	78.0
Total Split (%)	25.0%	25.0%	25.0%	15.9%	15.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	6.0	6.0	6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)		14.7	14.7		6.2	101.4	101.4	101.4
Actuated g/C Ratio		0.11	0.11		0.05	0.77	0.77	0.77
v/c Ratio		0.70	0.11		0.14	0.04	0.25	0.69

Intersection Summary

Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 38 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 17.7
 Intersection Capacity Utilization 67.7%
 Analysis Period (min) 15




















Splits and Phases: 2: Potomac Street & Louisiana Avenue





 Ø2 (R)	 Ø4	 Ø8
78 s	33 s	21 s
 Ø6 (R)		
78 s		

						
Lane Group	EBT	EBR	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	105	24	12	12	356	971
v/c Ratio	0.70	0.11	0.14	0.04	0.25	0.69
Control Delay	79.7	0.9	63.0	6.9	6.2	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	1.9
Total Delay	79.7	0.9	63.0	6.9	6.2	15.2
Queue Length 50th (ft)	88	0	10	2	60	281
Queue Length 95th (ft)	145	0	12	12	169	693
Internal Link Dist (ft)	715		260		100	235
Turn Bay Length (ft)				40		
Base Capacity (vph)	285	375	230	296	1444	1407
Starvation Cap Reductn	0	0	0	0	0	274
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.06	0.05	0.04	0.25	0.86
Intersection Summary						

HCM 6th Signalized Intersection Summary 05/17/2022

2: Potomac Street & Louisiana Avenue 2025 Background - AM Peak Hour









												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	0	22	3	1	0	11	320	0	0	758	77
Future Volume (veh/h)	98	0	22	3	1	0	11	320	0	0	758	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1900	1900	1900	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	105	0	24	9	3	0	12	356	0	0	881	90
Peak Hour Factor	0.93	0.93	0.93	0.33	0.33	0.33	0.90	0.90	0.90	0.86	0.86	0.86
Percent Heavy Veh, %	6	6	6	0	0	0	1	1	1	2	2	2
Cap, veh/h	189	0	147	74	18	0	414	1544	0	55	1366	140
Arrive On Green	0.10	0.00	0.10	0.10	0.10	0.00	0.82	0.82	0.00	0.00	0.82	0.82
Sat Flow, veh/h	1373	0	1503	267	187	0	584	1885	0	1025	1668	170
Grp Volume(v), veh/h	105	0	24	12	0	0	12	356	0	0	0	971
Grp Sat Flow(s),veh/h/ln	1373	0	1503	454	0	0	584	1885	0	1025	0	1839
Q Serve(g_s), s	0.0	0.0	1.9	0.2	0.0	0.0	1.1	5.6	0.0	0.0	0.0	26.8
Cycle Q Clear(g_c), s	9.8	0.0	1.9	10.0	0.0	0.0	27.8	5.6	0.0	0.0	0.0	26.8
Prop In Lane	1.00		1.00	0.75		0.00	1.00		0.00	1.00		0.09
Lane Grp Cap(c), veh/h	189	0	147	92	0	0	414	1544	0	55	0	1506
V/C Ratio(X)	0.56	0.00	0.16	0.13	0.00	0.00	0.03	0.23	0.00	0.00	0.00	0.64
Avail Cap(c_a), veh/h	344	0	319	127	0	0	414	1544	0	55	0	1506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	58.2	0.0	54.6	55.4	0.0	0.0	9.9	2.7	0.0	0.0	0.0	4.6
Incr Delay (d2), s/veh	1.0	0.0	0.2	0.5	0.0	0.0	0.1	0.3	0.0	0.0	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.7	0.4	0.0	0.0	0.2	1.8	0.0	0.0	0.0	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.1	0.0	54.8	55.8	0.0	0.0	10.1	3.0	0.0	0.0	0.0	6.7
LnGrp LOS	E	A	D	E	A	A	B	A	A	A	A	A
Approach Vol, veh/h	129			12			368			971		
Approach Delay, s/veh	58.3			55.8			3.2			6.7		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	114.1			17.9			114.1			17.9		
Change Period (Y+Rc), s	6.0			5.0			6.0			5.0		
Max Green Setting (Gmax), s	72.0			28.0			72.0			16.0		
Max Q Clear Time (g_c+I1), s	29.8			11.8			28.8			12.0		
Green Ext Time (p_c), s	5.1			0.3			21.1			0.0		
Intersection Summary												
HCM 6th Ctrl Delay	10.8											
HCM 6th LOS	B											

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	1	330	4	0	784
Future Vol, veh/h	4	1	330	4	0	784
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	30	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	91	91	89	89
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	6	2	363	4	0	881

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1249	368	0
Stage 1	368	-	-
Stage 2	881	-	-
Critical Hdwy	6.41	6.21	4.12
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.509	3.309	2.218
Pot Cap-1 Maneuver	192	680	1189
Stage 1	702	-	-
Stage 2	407	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	191	678	1186
Mov Cap-2 Maneuver	313	-	-
Stage 1	700	-	-
Stage 2	407	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	351	1186
HCM Lane V/C Ratio	-	-	0.023	-
HCM Control Delay (s)	-	-	15.5	0
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	2	10	8	1	10	31	245	43	89	341	10
Future Vol, veh/h	14	2	10	8	1	10	31	245	43	89	341	10
Conflicting Peds, #/hr	11	0	3	3	0	11	0	0	7	7	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	40	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	68	80	68	88	88	88	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	2	2	2
Mvmt Flow	22	3	15	12	1	15	35	278	49	99	379	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	975	987	388	975	968	321	390	0	0	334	0	0
Stage 1	583	583	-	380	380	-	-	-	-	-	-	-
Stage 2	392	404	-	595	588	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	233	249	665	233	256	724	1174	-	-	1225	-	-
Stage 1	502	502	-	646	617	-	-	-	-	-	-	-
Stage 2	637	603	-	494	499	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	206	220	663	205	227	712	1174	-	-	1217	-	-
Mov Cap-2 Maneuver	206	220	-	205	227	-	-	-	-	-	-	-
Stage 1	487	461	-	623	594	-	-	-	-	-	-	-
Stage 2	598	581	-	439	459	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19	16.4	0.8	1.7
HCM LOS	C	C		























Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1174	-	-	206	496	205	610	1217	-	-
HCM Lane V/C Ratio	0.03	-	-	0.105	0.037	0.057	0.026	0.081	-	-
HCM Control Delay (s)	8.2	-	-	24.5	12.5	23.6	11.1	8.2	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0.2	0.1	0.3	-	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	35	26	5	2	21	29	7	62	3	20	14	18
Future Vol, veh/h	35	26	5	2	21	29	7	62	3	20	14	18
Peak Hour Factor	0.77	0.77	0.77	0.93	0.93	0.93	0.71	0.71	0.71	0.62	0.62	0.62
Heavy Vehicles, %	6	6	6	8	8	8	0	0	0	10	10	10
Mvmt Flow	45	34	6	2	23	31	10	87	4	32	23	29
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	7.5	7.9	7.9
HCM LOS	A	A	A	A













Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	53%	4%	38%
Vol Thru, %	86%	39%	40%	27%
Vol Right, %	4%	8%	56%	35%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	72	66	52	52
LT Vol	7	35	2	20
Through Vol	62	26	21	14
RT Vol	3	5	29	18
Lane Flow Rate	101	86	56	84
Geometry Grp	1	1	1	1
Degree of Util (X)	0.121	0.108	0.066	0.102
Departure Headway (Hd)	4.311	4.541	4.224	4.374
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	834	792	850	822
Service Time	2.324	2.554	2.238	2.386
HCM Lane V/C Ratio	0.121	0.109	0.066	0.102
HCM Control Delay	7.9	8.1	7.5	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.4	0.2	0.3












											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	39	1701	76	306	1572	110	93	566	205	152	97
Future Volume (vph)	39	1701	76	306	1572	110	93	566	205	152	97
Turn Type	Prot	NA	Perm	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6	3	8		7	4	5
Permitted Phases			2			8		8	4		4
Detector Phase	5	2	2	1	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	3.0	5.0	5.0	3.0	5.0	4.0
Minimum Split (s)	9.5	29.0	29.0	9.5	24.0	9.5	38.0	38.0	9.5	34.0	9.5
Total Split (s)	14.0	47.0	47.0	26.0	59.0	23.0	26.0	26.0	23.0	26.0	14.0
Total Split (%)	11.5%	38.5%	38.5%	21.3%	48.4%	18.9%	21.3%	21.3%	18.9%	21.3%	11.5%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	4.0	6.0	6.0	4.0	6.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None
Act Effect Green (s)	6.7	55.8	55.8	15.3	64.3	25.2	12.8	12.8	35.9	19.6	27.3
Actuated g/C Ratio	0.05	0.46	0.46	0.13	0.53	0.21	0.10	0.10	0.29	0.16	0.22
v/c Ratio	0.44	0.80	0.11	0.75	0.66	0.42	0.54	0.83	0.62	0.60	0.51

Intersection Summary

Cycle Length: 122
 Actuated Cycle Length: 122
 Offset: 45 (37%), Referenced to phase 2:EBT and 6:WBT, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 31.1
 Intersection Capacity Utilization 78.3%
 Analysis Period (min) 15

Splits and Phases: 1: Potomac Street & Mississippi Avenue

					
26 s	47 s		23 s	26 s	
					
14 s	59 s		23 s	26 s	

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	43	1869	84	322	1752	125	106	643	244	181	243
v/c Ratio	0.44	0.80	0.11	0.75	0.66	0.42	0.54	0.83	0.62	0.60	0.51
Control Delay	69.1	33.4	0.3	62.4	23.8	35.8	60.6	19.4	41.3	55.4	16.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.1	33.4	0.3	62.4	23.8	35.8	60.6	19.4	41.3	55.4	16.2
Queue Length 50th (ft)	33	460	0	128	358	74	81	44	155	133	52
Queue Length 95th (ft)	72	#689	0	171	491	110	128	101	194	184	0
Internal Link Dist (ft)		1218			819		404			347	
Turn Bay Length (ft)	135		430	400		160		200	50		50
Base Capacity (vph)	130	2325	784	590	2655	419	308	904	406	332	502
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.80	0.11	0.55	0.66	0.30	0.34	0.71	0.60	0.55	0.48































Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

1: Potomac Street & Mississippi Avenue

2025 Background - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  				 		 	
Traffic Volume (veh/h)	39	1701	76	306	1572	92	110	93	566	205	152	97
Future Volume (veh/h)	39	1701	76	306	1572	92	110	93	566	205	152	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	43	1869	0	322	1655	97	125	106	0	244	181	242
Peak Hour Factor	0.91	0.91	0.91	0.95	0.95	0.95	0.88	0.88	0.88	0.84	0.84	0.40
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	55	2444		380	2749	161	268	198		367	306	307
Arrive On Green	0.03	0.48	0.00	0.11	0.56	0.56	0.08	0.10	0.00	0.13	0.16	0.16
Sat Flow, veh/h	1781	5106	1585	3456	4930	289	1795	1885	2812	1795	1885	1586
Grp Volume(v), veh/h	43	1869	0	322	1142	610	125	106	0	244	181	242
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1815	1795	1885	1406	1795	1885	1586
Q Serve(g_s), s	2.9	36.7	0.0	11.2	27.3	27.3	7.5	6.5	0.0	14.3	10.9	17.7
Cycle Q Clear(g_c), s	2.9	36.7	0.0	11.2	27.3	27.3	7.5	6.5	0.0	14.3	10.9	17.7
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	55	2444		380	1898	1012	268	198		367	306	307
V/C Ratio(X)	0.78	0.76		0.85	0.60	0.60	0.47	0.54		0.67	0.59	0.79
Avail Cap(c_a), veh/h	131	2444		595	1898	1012	409	309		405	309	309
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	26.2	0.0	53.3	18.0	18.0	43.9	51.8	0.0	39.5	47.4	46.8
Incr Delay (d2), s/veh	8.5	2.3	0.0	3.9	1.4	2.7	0.5	0.8	0.0	2.6	2.0	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	14.6	0.0	5.0	10.4	11.4	3.4	3.1	0.0	6.6	5.3	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.2	28.5	0.0	57.2	19.4	20.6	44.4	52.6	0.0	42.0	49.4	58.5
LnGrp LOS	E	C		E	B	C	D	D		D	D	E
Approach Vol, veh/h		1912			2074			231			667	
Approach Delay, s/veh		29.4			25.6			48.2			50.0	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.4	64.4	13.4	25.8	8.8	74.0	20.4	18.8				
Change Period (Y+Rc), s	5.0	6.0	4.0	6.0	5.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	21.0	41.0	19.0	20.0	9.0	53.0	19.0	20.0				
Max Q Clear Time (g_c+I1), s	13.2	38.7	9.5	19.7	4.9	29.3	16.3	8.5				
Green Ext Time (p_c), s	0.3	2.0	0.1	0.0	0.0	13.2	0.1	0.2				

Intersection Summary

HCM 6th Ctrl Delay	31.5
HCM 6th LOS	C

Notes














User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
05/17/2022

2: Potomac Street & Louisiana Avenue





2025 Background - PM Peak Hour

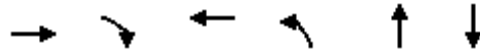
							
Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	98	0	7	0	12	681	320
Future Volume (vph)	98	0	7	0	12	681	320
Turn Type	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases		4		8		2	6
Permitted Phases	4		4		2		
Detector Phase	4	4	4	8	2	2	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	23.0	23.0	23.0	24.0	18.0	18.0	22.0
Total Split (s)	33.0	33.0	33.0	21.0	78.0	78.0	78.0
Total Split (%)	25.0%	25.0%	25.0%	15.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	6.0	6.0	6.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)		45.2	45.2	5.0	73.8	73.8	73.8
Actuated g/C Ratio		0.34	0.34	0.04	0.56	0.56	0.56
v/c Ratio		2.21	0.02	0.03	0.03	0.79	0.43

Intersection Summary

Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 38 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.21
 Intersection Signal Delay: 77.7
 Intersection Capacity Utilization 57.5%
 Analysis Period (min) 15

Splits and Phases: 2: Potomac Street & Louisiana Avenue

 Ø2 (R)	 Ø4	 Ø8
78 s	33 s	21 s
 Ø6 (R)		
78 s		



Lane Group	EBT	EBR	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	124	9	8	14	822	435
v/c Ratio	2.21	0.02	0.03	0.03	0.79	0.43
Control Delay	630.5	0.0	0.0	11.7	29.0	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	630.5	0.0	0.0	11.7	29.0	17.2
Queue Length 50th (ft)	~169	0	0	5	533	199
Queue Length 95th (ft)	#255	0	0	12	505	231
Internal Link Dist (ft)	715		260		100	235
Turn Bay Length (ft)				40		
Base Capacity (vph)	56	569	411	429	1055	1019
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	2.21	0.02	0.02	0.03	0.78	0.43

Intersection Summary




















- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.





HCM 6th Signalized Intersection Summary

2: Potomac Street & Louisiana Avenue

05/17/2022

2025 Background - PM Peak Hour









												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	0	7	0	0	2	12	681	2	0	320	93
Future Volume (veh/h)	98	0	7	0	0	2	12	681	2	0	320	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	124	0	9	0	0	8	14	820	2	0	337	98
Peak Hour Factor	0.79	0.79	0.79	0.25	0.25	0.25	0.83	0.83	0.83	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	0	0	2	2	2	2	2	2
Cap, veh/h	204	0	174	0	0	178	762	1501	4	55	1120	326
Arrive On Green	0.11	0.00	0.11	0.00	0.00	0.11	0.81	0.81	0.81	0.00	0.81	0.81
Sat Flow, veh/h	1340	0	1564	0	0	1597	953	1865	5	666	1391	404
Grp Volume(v), veh/h	124	0	9	0	0	8	14	0	822	0	0	435
Grp Sat Flow(s),veh/h/ln	1340	0	1564	0	0	1597	953	0	1869	666	0	1795
Q Serve(g_s), s	11.5	0.0	0.7	0.0	0.0	0.6	0.5	0.0	20.2	0.0	0.0	8.2
Cycle Q Clear(g_c), s	12.1	0.0	0.7	0.0	0.0	0.6	8.7	0.0	20.2	0.0	0.0	8.2
Prop In Lane	1.00		1.00	0.00		1.00	1.00		0.00	1.00		0.23
Lane Grp Cap(c), veh/h	204	0	174	0	0	178	762	0	1505	55	0	1446
V/C Ratio(X)	0.61	0.00	0.05	0.00	0.00	0.04	0.02	0.00	0.55	0.00	0.00	0.30
Avail Cap(c_a), veh/h	344	0	332	0	0	194	762	0	1505	55	0	1446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	57.7	0.0	52.4	0.0	0.0	52.4	4.4	0.0	4.5	0.0	0.0	3.3
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	1.4	0.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.3	0.0	0.0	0.2	0.1	0.0	6.9	0.0	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.8	0.0	52.4	0.0	0.0	52.4	4.5	0.0	5.9	0.0	0.0	3.8
LnGrp LOS	E	A	D	A	A	D	A	A	A	A	A	A
Approach Vol, veh/h		133			8			836			435	
Approach Delay, s/veh		58.4			52.4			5.9			3.8	
Approach LOS		E			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		112.3		19.7		112.3		19.7				
Change Period (Y+Rc), s		6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s		72.0		28.0		72.0		16.0				
Max Q Clear Time (g_c+I1), s		22.2		14.1		10.2		2.6				
Green Ext Time (p_c), s		16.8		0.3		6.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				10.5								
HCM 6th LOS				B								
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	695	0	0	327
Future Vol, veh/h	0	0	695	0	0	327
Conflicting Peds, #/hr	1	1	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	30	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	25	25	82	82	89	89
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	0	0	848	0	0	367

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1227	860	0	0	859	0
Stage 1	859	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.13	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.227	-
Pot Cap-1 Maneuver	199	359	-	-	778	-
Stage 1	418	-	-	-	-	-
Stage 2	704	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	197	355	-	-	770	-
Mov Cap-2 Maneuver	318	-	-	-	-	-
Stage 1	414	-	-	-	-	-
Stage 2	703	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	770
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	3	25	21	3	53	18	338	7	16	253	13
Future Vol, veh/h	35	3	25	21	3	53	18	338	7	16	253	13
Conflicting Peds, #/hr	3	0	2	2	0	3	1	0	3	3	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	40	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	76	76	76	94	94	94	98	98	98
Heavy Vehicles, %	2	2	2	0	0	0	2	2	2	1	1	1
Mvmt Flow	45	4	32	28	4	70	19	360	7	16	258	13

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	740	706	268	722	709	370	272	0	0	370	0	0
Stage 1	298	298	-	405	405	-	-	-	-	-	-	-
Stage 2	442	408	-	317	304	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.5	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	333	361	771	345	362	680	1291	-	-	1194	-	-
Stage 1	711	667	-	626	602	-	-	-	-	-	-	-
Stage 2	594	597	-	698	667	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	289	349	769	319	350	676	1290	-	-	1191	-	-
Mov Cap-2 Maneuver	289	349	-	319	350	-	-	-	-	-	-	-
Stage 1	700	658	-	615	591	-	-	-	-	-	-	-
Stage 2	520	586	-	655	658	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	15.7		13		0.4		0.5	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1290	-	-	289	681	319	644	1191	-	-
HCM Lane V/C Ratio	0.015	-	-	0.155	0.053	0.087	0.114	0.014	-	-
HCM Control Delay (s)	7.8	-	-	19.7	10.6	17.4	11.3	8.1	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.2	0.3	0.4	0	-	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	15	10	3	20	21	4	39	2	19	55	27
Future Vol, veh/h	19	15	10	3	20	21	4	39	2	19	55	27
Peak Hour Factor	0.65	0.65	0.65	0.58	0.58	0.58	0.87	0.87	0.87	0.81	0.81	0.81
Heavy Vehicles, %	5	5	5	7	7	7	0	0	0	2	2	2
Mvmt Flow	29	23	15	5	34	36	5	45	2	23	68	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0























Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	7.6	7.6	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	43%	7%	19%
Vol Thru, %	87%	34%	45%	54%
Vol Right, %	4%	23%	48%	27%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	45	44	44	101
LT Vol	4	19	3	19
Through Vol	39	15	20	55
RT Vol	2	10	21	27
Lane Flow Rate	52	68	76	125
Geometry Grp	1	1	1	1
Degree of Util (X)	0.062	0.083	0.089	0.145
Departure Headway (Hd)	4.343	4.407	4.213	4.2
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	827	816	853	859
Service Time	2.356	2.418	2.222	2.2
HCM Lane V/C Ratio	0.063	0.083	0.089	0.146
HCM Control Delay	7.6	7.8	7.6	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.3	0.5

Intersection Capacity Worksheets: 2040 Background

Timings
05/17/2022









1: Potomac Street & Mississippi Avenue
2040 Background - AM Peak Hour












											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	30	1365	140	860	2000	70	75	340	175	110	80
Future Volume (vph)	30	1365	140	860	2000	70	75	340	175	110	80
Turn Type	Prot	NA	Perm	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6	3	8		7	4	
Permitted Phases			2			8		8	4		4
Detector Phase	5	2	2	1	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	3.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)	9.5	29.0	29.0	9.5	24.0	9.5	38.0	38.0	9.5	34.0	34.0
Total Split (s)	14.0	30.0	30.0	46.0	62.0	10.0	20.0	20.0	25.0	35.0	35.0
Total Split (%)	11.6%	24.8%	24.8%	38.0%	51.2%	8.3%	16.5%	16.5%	20.7%	28.9%	28.9%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None
Act Effect Green (s)	6.3	38.3	38.3	36.1	71.9	17.5	9.7	9.7	31.6	21.6	21.6
Actuated g/C Ratio	0.05	0.32	0.32	0.30	0.59	0.14	0.08	0.08	0.26	0.18	0.18
v/c Ratio	0.36	0.92	0.25	0.90	0.74	0.36	0.54	0.66	0.53	0.35	0.21

Intersection Summary

Cycle Length: 121
 Actuated Cycle Length: 121
 Offset: 95 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Green
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 35.5
 Intersection Capacity Utilization 81.7%
 Analysis Period (min) 15

Splits and Phases: 1: Potomac Street & Mississippi Avenue

			
Ø1	Ø2 (R)	Ø3	Ø4
46 s	30 s	10 s	35 s
			
Ø5	Ø6 (R)	Ø7	Ø8
14 s	62 s	25 s	20 s

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	33	1484	152	915	2213	76	82	370	188	118	86
v/c Ratio	0.36	0.92	0.25	0.90	0.74	0.36	0.54	0.66	0.53	0.35	0.21
Control Delay	65.5	51.4	3.5	53.1	22.4	38.8	66.1	11.1	41.0	45.7	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.5	51.4	3.5	53.1	22.4	38.8	66.1	11.1	41.0	45.7	1.2
Queue Length 50th (ft)	25	412	0	350	471	46	63	0	122	83	0
Queue Length 95th (ft)	59	#680	31	411	#721	78	112	49	171	129	0
Internal Link Dist (ft)		1218			819		404			347	
Turn Bay Length (ft)	135		430	400		160		200	50		50
Base Capacity (vph)	131	1607	620	1152	2973	212	217	647	393	450	494
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.92	0.25	0.79	0.74	0.36	0.38	0.57	0.48	0.26	0.17































Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

1: Potomac Street & Mississippi Avenue

2040 Background - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  				 		 	
Traffic Volume (veh/h)	30	1365	140	860	2000	80	70	75	340	175	110	80
Future Volume (veh/h)	30	1365	140	860	2000	80	70	75	340	175	110	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	33	1484	0	915	2128	85	76	82	0	188	118	86
Peak Hour Factor	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	42	1861		976	3127	124	225	123		291	241	203
Arrive On Green	0.02	0.36	0.00	0.28	0.63	0.63	0.05	0.07	0.00	0.11	0.13	0.13
Sat Flow, veh/h	1781	5106	1585	3428	4997	199	1795	1885	2812	1795	1885	1586
Grp Volume(v), veh/h	33	1484	0	915	1436	777	76	82	0	188	118	86
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1714	1689	1819	1795	1885	1406	1795	1885	1586
Q Serve(g_s), s	2.2	31.5	0.0	31.5	33.5	33.8	4.7	5.1	0.0	11.4	7.0	6.1
Cycle Q Clear(g_c), s	2.2	31.5	0.0	31.5	33.5	33.8	4.7	5.1	0.0	11.4	7.0	6.1
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	42	1861		976	2113	1138	225	123		291	241	203
V/C Ratio(X)	0.79	0.80		0.94	0.68	0.68	0.34	0.67		0.65	0.49	0.42
Avail Cap(c_a), veh/h	132	1861		1162	2113	1138	225	218		401	452	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	34.5	0.0	42.2	14.7	14.8	49.5	55.3	0.0	44.2	49.1	48.7
Incr Delay (d2), s/veh	11.5	3.7	0.0	11.8	1.8	3.3	0.3	2.3	0.0	0.9	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	13.2	0.0	14.5	12.1	13.6	2.1	2.5	0.0	5.2	3.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.3	38.1	0.0	54.1	16.5	18.1	49.8	57.6	0.0	45.1	49.7	49.2
LnGrp LOS	E	D		D	B	B	D	E		D	D	D
Approach Vol, veh/h		1517			3128			158			392	
Approach Delay, s/veh		38.8			27.9			53.8			47.4	
Approach LOS		D			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	39.5	50.1	10.0	21.4	7.8	81.7	17.5	13.9				
Change Period (Y+Rc), s	5.0	6.0	4.0	6.0	5.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	41.0	24.0	6.0	29.0	9.0	56.0	21.0	14.0				
Max Q Clear Time (g_c+I1), s	33.5	33.5	6.7	9.0	4.2	35.8	13.4	7.1				
Green Ext Time (p_c), s	0.9	0.0	0.0	0.5	0.0	15.1	0.2	0.1				

Intersection Summary

HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

Notes















User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
05/17/2022

2: Potomac Street & Louisiana Avenue





2040 Background - AM Peak Hour







								
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Configurations								
Traffic Volume (vph)	105	0	25	5	1	10	345	815
Future Volume (vph)	105	0	25	5	1	10	345	815
Turn Type	Perm	NA	Perm	Perm	NA	Perm	NA	NA
Protected Phases		4			8		2	6
Permitted Phases	4		4	8		2		
Detector Phase	4	4	4	8	8	2	2	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	23.0	23.0	23.0	24.0	24.0	18.0	18.0	22.0
Total Split (s)	33.0	33.0	33.0	21.0	21.0	78.0	78.0	78.0
Total Split (%)	25.0%	25.0%	25.0%	15.9%	15.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	6.0	6.0	6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)		14.4	14.4		6.8	101.3	101.3	101.3
Actuated g/C Ratio		0.11	0.11		0.05	0.77	0.77	0.77
v/c Ratio		0.70	0.12		0.19	0.04	0.26	0.70

Intersection Summary

Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 38 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 18.2
 Intersection Capacity Utilization 71.2%
 Analysis Period (min) 15

Splits and Phases: 2: Potomac Street & Louisiana Avenue

 Ø2 (R)	 Ø4	 Ø8
78 s	33 s	21 s
 Ø6 (R)		
78 s		

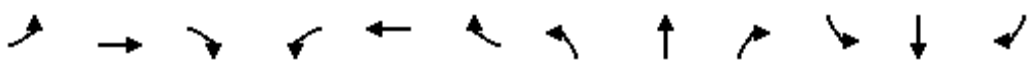
						
Lane Group	EBT	EBR	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	113	27	18	11	375	978
v/c Ratio	0.70	0.12	0.19	0.04	0.26	0.70
Control Delay	77.9	1.1	63.5	7.0	6.4	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	2.0
Total Delay	77.9	1.1	63.5	7.0	6.4	15.6
Queue Length 50th (ft)	95	0	15	2	63	281
Queue Length 95th (ft)	154	0	15	11	181	795
Internal Link Dist (ft)	715		260		100	235
Turn Bay Length (ft)				40		
Base Capacity (vph)	316	375	230	290	1443	1406
Starvation Cap Reductn	0	0	0	0	0	272
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.07	0.08	0.04	0.26	0.86
Intersection Summary						





HCM 6th Signalized Intersection Summary

2: Potomac Street & Louisiana Avenue

05/17/2022

2040 Background - AM Peak Hour









												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱		↰	↱	↰	↱		↰	↱	
Traffic Volume (veh/h)	105	0	25	5	1	0	10	345	0	0	815	85
Future Volume (veh/h)	105	0	25	5	1	0	10	345	0	0	815	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1900	1900	1900	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	113	0	27	15	3	0	11	375	0	0	886	92
Peak Hour Factor	0.93	0.93	0.93	0.33	0.33	0.33	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	0	0	0	1	1	1	2	2	2
Cap, veh/h	202	0	150	82	12	0	408	1540	0	55	1361	141
Arrive On Green	0.10	0.00	0.10	0.10	0.10	0.00	0.82	0.82	0.00	0.00	0.82	0.82
Sat Flow, veh/h	1479	0	1504	323	122	0	580	1885	0	1008	1666	173
Grp Volume(v), veh/h	113	0	27	18	0	0	11	375	0	0	0	978
Grp Sat Flow(s),veh/h/ln	1479	0	1504	446	0	0	580	1885	0	1008	0	1838
Q Serve(g_s), s	0.0	0.0	2.2	1.1	0.0	0.0	1.0	6.0	0.0	0.0	0.0	27.4
Cycle Q Clear(g_c), s	9.6	0.0	2.2	10.7	0.0	0.0	28.4	6.0	0.0	0.0	0.0	27.4
Prop In Lane	1.00		1.00	0.83		0.00	1.00		0.00	1.00		0.09
Lane Grp Cap(c), veh/h	202	0	150	94	0	0	408	1540	0	55	0	1502
V/C Ratio(X)	0.56	0.00	0.18	0.19	0.00	0.00	0.03	0.24	0.00	0.00	0.00	0.65
Avail Cap(c_a), veh/h	355	0	319	126	0	0	408	1540	0	55	0	1502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	57.8	0.0	54.5	59.9	0.0	0.0	10.3	2.8	0.0	0.0	0.0	4.7
Incr Delay (d2), s/veh	0.9	0.0	0.2	0.7	0.0	0.0	0.1	0.4	0.0	0.0	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.8	0.6	0.0	0.0	0.1	2.0	0.0	0.0	0.0	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.8	0.0	54.7	60.6	0.0	0.0	10.4	3.1	0.0	0.0	0.0	6.9
LnGrp LOS	E	A	D	E	A	A	B	A	A	A	A	A
Approach Vol, veh/h		140			18			386			978	
Approach Delay, s/veh		58.0			60.6			3.3			6.9	
Approach LOS		E			E			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		113.8		18.2		113.8		18.2				
Change Period (Y+Rc), s		6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s		72.0		28.0		72.0		16.0				
Max Q Clear Time (g_c+I1), s		30.4		11.6		29.4		12.7				
Green Ext Time (p_c), s		5.4		0.4		21.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				11.3								
HCM 6th LOS				B								
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	1	355	5	0	845
Future Vol, veh/h	5	1	355	5	0	845
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	30	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	92	92	92	92
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	8	2	386	5	0	918

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1310	392	0
Stage 1	392	-	-
Stage 2	918	-	-
Critical Hdwy	6.41	6.21	-
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.509	3.309	-
Pot Cap-1 Maneuver	176	659	-
Stage 1	685	-	-
Stage 2	391	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	175	657	-
Mov Cap-2 Maneuver	298	-	-
Stage 1	683	-	-
Stage 2	391	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	328	1162
HCM Lane V/C Ratio	-	-	0.029	-
HCM Control Delay (s)	-	-	16.3	0
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	2	10	10	1	10	35	265	45	95	370	10
Future Vol, veh/h	15	2	10	10	1	10	35	265	45	95	370	10
Conflicting Peds, #/hr	11	0	3	3	0	11	0	0	7	7	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	40	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	68	80	68	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	2	2	2
Mvmt Flow	23	3	15	15	1	15	38	288	49	103	402	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1022	1034	411	1022	1015	331	413	0	0	344	0	0
Stage 1	614	614	-	396	396	-	-	-	-	-	-	-
Stage 2	408	420	-	626	619	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	216	234	645	216	240	715	1151	-	-	1215	-	-
Stage 1	483	486	-	633	607	-	-	-	-	-	-	-
Stage 2	624	593	-	475	483	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	190	206	643	188	211	703	1151	-	-	1207	-	-
Mov Cap-2 Maneuver	190	206	-	188	211	-	-	-	-	-	-	-
Stage 1	467	445	-	608	583	-	-	-	-	-	-	-
Stage 2	583	569	-	420	442	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	20.5		18.2		0.8		1.7	
HCM LOS	C		C					























Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1151	-	-	190	475	188	594	1207	-	-
HCM Lane V/C Ratio	0.033	-	-	0.121	0.039	0.078	0.027	0.086	-	-
HCM Control Delay (s)	8.2	-	-	26.6	12.9	25.8	11.2	8.3	-	-
HCM Lane LOS	A	-	-	D	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0.3	0.1	0.3	-	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	35	30	5	2	25	30	10	65	5	20	15	20
Future Vol, veh/h	35	30	5	2	25	30	10	65	5	20	15	20
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	6	6	6	8	8	8	0	0	0	10	10	10
Mvmt Flow	40	34	6	2	27	32	11	74	6	23	17	23
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	7.5	7.8	7.7
HCM LOS	A	A	A	A













Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	50%	4%	36%
Vol Thru, %	81%	43%	44%	27%
Vol Right, %	6%	7%	53%	36%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	80	70	57	55
LT Vol	10	35	2	20
Through Vol	65	30	25	15
RT Vol	5	5	30	20
Lane Flow Rate	91	80	61	62
Geometry Grp	1	1	1	1
Degree of Util (X)	0.108	0.099	0.071	0.075
Departure Headway (Hd)	4.28	4.474	4.163	4.342
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	842	805	864	828
Service Time	2.284	2.478	2.171	2.352
HCM Lane V/C Ratio	0.108	0.099	0.071	0.075
HCM Control Delay	7.8	8	7.5	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.3	0.2	0.2












											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	40	1975	80	330	1825	120	100	610	220	165	105
Future Volume (vph)	40	1975	80	330	1825	120	100	610	220	165	105
Turn Type	Prot	NA	Perm	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6	3	8		7	4	5
Permitted Phases			2			8		8	4		4
Detector Phase	5	2	2	1	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	3.0	5.0	5.0	3.0	5.0	4.0
Minimum Split (s)	9.5	29.0	29.0	9.5	24.0	9.5	38.0	38.0	9.5	34.0	9.5
Total Split (s)	14.0	47.0	47.0	26.0	59.0	23.0	26.0	26.0	23.0	26.0	14.0
Total Split (%)	11.5%	38.5%	38.5%	21.3%	48.4%	18.9%	21.3%	21.3%	18.9%	21.3%	11.5%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	4.0	6.0	6.0	4.0	6.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None
Act Effect Green (s)	6.7	54.9	54.9	16.2	64.3	25.7	13.1	13.1	36.0	19.3	27.1
Actuated g/C Ratio	0.05	0.45	0.45	0.13	0.53	0.21	0.11	0.11	0.30	0.16	0.22
v/c Ratio	0.44	0.94	0.11	0.76	0.76	0.43	0.54	0.85	0.61	0.60	0.26

Intersection Summary

Cycle Length: 122
 Actuated Cycle Length: 122
 Offset: 45 (37%), Referenced to phase 2:EBT and 6:WBT, Start of Green
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 35.5
 Intersection Capacity Utilization 85.8%
 Analysis Period (min) 15

Splits and Phases: 1: Potomac Street & Mississippi Avenue

					
26 s	47 s		23 s	26 s	
					
14 s	59 s		23 s	26 s	

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	43	2147	87	347	2026	130	109	663	239	179	114
v/c Ratio	0.44	0.94	0.11	0.76	0.76	0.43	0.54	0.85	0.61	0.60	0.26
Control Delay	69.1	42.4	0.3	62.2	26.8	35.9	60.4	21.4	40.9	55.6	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.1	42.4	0.3	62.2	26.8	35.9	60.4	21.4	40.9	55.6	8.0
Queue Length 50th (ft)	33	585	0	137	452	77	83	52	152	132	4
Queue Length 95th (ft)	72	#867	1	181	616	117	134	122	206	199	45
Internal Link Dist (ft)		1218			819		404			347	
Turn Bay Length (ft)	135		430	400		160		200	50		50
Base Capacity (vph)	130	2286	773	590	2653	421	308	905	405	331	461
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.94	0.11	0.59	0.76	0.31	0.35	0.73	0.59	0.54	0.25
































Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

1: Potomac Street & Mississippi Avenue

2040 Background - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  				 	 	 	
Traffic Volume (veh/h)	40	1975	80	330	1825	100	120	100	610	220	165	105
Future Volume (veh/h)	40	1975	80	330	1825	100	120	100	610	220	165	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	43	2147	0	347	1921	105	130	109	0	239	179	114
Peak Hour Factor	0.92	0.92	0.92	0.95	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	55	2504		405	2856	156	258	162		339	263	270
Arrive On Green	0.03	0.49	0.00	0.12	0.58	0.58	0.08	0.09	0.00	0.13	0.14	0.14
Sat Flow, veh/h	1781	5106	1585	3456	4953	270	1795	1885	2812	1795	1885	1584
Grp Volume(v), veh/h	43	2147	0	347	1319	707	130	109	0	239	179	114
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1818	1795	1885	1406	1795	1885	1584
Q Serve(g_s), s	2.9	45.1	0.0	12.0	32.7	32.9	7.9	6.8	0.0	14.3	11.0	7.9
Cycle Q Clear(g_c), s	2.9	45.1	0.0	12.0	32.7	32.9	7.9	6.8	0.0	14.3	11.0	7.9
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	55	2504		405	1963	1048	258	162		339	263	270
V/C Ratio(X)	0.78	0.86		0.86	0.67	0.67	0.50	0.67		0.71	0.68	0.42
Avail Cap(c_a), veh/h	131	2504		595	1963	1048	392	309		377	309	309
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	27.3	0.0	52.8	17.9	17.9	45.7	54.1	0.0	41.4	49.9	45.2
Incr Delay (d2), s/veh	8.5	4.1	0.0	5.7	1.9	3.5	0.6	1.8	0.0	4.0	3.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	18.2	0.0	5.4	12.4	13.8	3.6	3.3	0.0	6.8	5.5	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.2	31.4	0.0	58.6	19.7	21.4	46.3	55.9	0.0	45.4	53.2	45.6
LnGrp LOS	E	C		E	B	C	D	E		D	D	D
Approach Vol, veh/h		2190			2373			239			532	
Approach Delay, s/veh		32.1			25.9			50.7			48.1	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.3	65.8	13.9	23.0	8.8	76.3	20.4	16.5				
Change Period (Y+Rc), s	5.0	6.0	4.0	6.0	5.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	21.0	41.0	19.0	20.0	9.0	53.0	19.0	20.0				
Max Q Clear Time (g_c+I1), s	14.0	47.1	9.9	13.0	4.9	34.9	16.3	8.8				
Green Ext Time (p_c), s	0.3	0.0	0.1	0.5	0.0	12.8	0.1	0.2				

Intersection Summary

HCM 6th Ctrl Delay	31.8
HCM 6th LOS	C

Notes














User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
05/17/2022

2: Potomac Street & Louisiana Avenue





2040 Background - PM Peak Hour

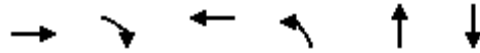
							
Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	105	0	10	0	15	735	345
Future Volume (vph)	105	0	10	0	15	735	345
Turn Type	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases		4		8		2	6
Permitted Phases	4		4		2		
Detector Phase	4	4	4	8	2	2	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	23.0	23.0	23.0	24.0	18.0	18.0	22.0
Total Split (s)	33.0	33.0	33.0	21.0	78.0	78.0	78.0
Total Split (%)	25.0%	25.0%	25.0%	15.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	6.0	6.0	6.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)		45.7	45.7	5.0	73.3	73.3	73.3
Actuated g/C Ratio		0.35	0.35	0.04	0.56	0.56	0.56
v/c Ratio		2.04	0.02	0.03	0.04	0.77	0.47

Intersection Summary

Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 38 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.04
 Intersection Signal Delay: 65.9
 Intersection Capacity Utilization 60.7%
 Analysis Period (min) 15

Splits and Phases: 2: Potomac Street & Louisiana Avenue

 Ø2 (R)	 Ø4	 Ø8
78 s	33 s	21 s
 Ø6 (R)		
78 s		



Lane Group	EBT	EBR	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	114	11	8	16	801	468
v/c Ratio	2.04	0.02	0.03	0.04	0.77	0.47
Control Delay	544.5	0.1	0.0	12.0	28.4	18.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	544.5	0.1	0.0	12.0	28.4	18.1
Queue Length 50th (ft)	~151	0	0	6	511	221
Queue Length 95th (ft)	#272	0	0	15	582	261
Internal Link Dist (ft)	715		260		100	235
Turn Bay Length (ft)				40		
Base Capacity (vph)	56	574	425	398	1053	1017
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	2.04	0.02	0.02	0.04	0.76	0.46




















Intersection Summary





- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

2: Potomac Street & Louisiana Avenue

2040 Background - PM Peak Hour









												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	0	10	0	0	2	15	735	2	0	345	100
Future Volume (veh/h)	105	0	10	0	0	2	15	735	2	0	345	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	114	0	11	0	0	8	16	799	2	0	363	105
Peak Hour Factor	0.92	0.92	0.92	0.25	0.25	0.25	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	0	0	2	2	2	2	2	2
Cap, veh/h	195	0	164	0	0	168	743	1513	4	55	1130	327
Arrive On Green	0.11	0.00	0.11	0.00	0.00	0.11	0.81	0.81	0.81	0.00	0.81	0.81
Sat Flow, veh/h	1336	0	1562	0	0	1596	924	1865	5	679	1393	403
Grp Volume(v), veh/h	114	0	11	0	0	8	16	0	801	0	0	468
Grp Sat Flow(s),veh/h/ln	1336	0	1562	0	0	1596	924	0	1869	679	0	1796
Q Serve(g_s), s	10.6	0.0	0.8	0.0	0.0	0.6	0.6	0.0	18.6	0.0	0.0	8.8
Cycle Q Clear(g_c), s	11.2	0.0	0.8	0.0	0.0	0.6	9.4	0.0	18.6	0.0	0.0	8.8
Prop In Lane	1.00		1.00	0.00		1.00	1.00		0.00	1.00		0.22
Lane Grp Cap(c), veh/h	195	0	164	0	0	168	743	0	1517	55	0	1457
V/C Ratio(X)	0.58	0.00	0.07	0.00	0.00	0.05	0.02	0.00	0.53	0.00	0.00	0.32
Avail Cap(c_a), veh/h	344	0	331	0	0	194	743	0	1517	55	0	1457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	58.1	0.0	53.2	0.0	0.0	53.1	4.4	0.0	4.1	0.0	0.0	3.2
Incr Delay (d2), s/veh	1.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	1.3	0.0	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.3	0.0	0.0	0.2	0.1	0.0	6.2	0.0	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.2	0.0	53.3	0.0	0.0	53.2	4.4	0.0	5.4	0.0	0.0	3.8
LnGrp LOS	E	A	D	A	A	D	A	A	A	A	A	A
Approach Vol, veh/h		125			8			817			468	
Approach Delay, s/veh		58.7			53.2			5.4			3.8	
Approach LOS		E			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		113.1		18.9		113.1		18.9				
Change Period (Y+Rc), s		6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s		72.0		28.0		72.0		16.0				
Max Q Clear Time (g_c+I1), s		20.6		13.2		10.8		2.6				
Green Ext Time (p_c), s		16.3		0.3		7.4		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			9.8									
HCM 6th LOS			A									
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	750	0	0	350
Future Vol, veh/h	0	0	750	0	0	350
Conflicting Peds, #/hr	1	1	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	30	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	25	25	92	92	92	92
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	0	0	815	0	0	380

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1207	827	0	0	826	0
Stage 1	826	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.13	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.227	-
Pot Cap-1 Maneuver	204	375	-	-	800	-
Stage 1	433	-	-	-	-	-
Stage 2	695	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	202	371	-	-	792	-
Mov Cap-2 Maneuver	326	-	-	-	-	-
Stage 1	429	-	-	-	-	-
Stage 2	694	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	792
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	3	25	25	3	55	20	365	10	20	270	15
Future Vol, veh/h	35	3	25	25	3	55	20	365	10	20	270	15
Conflicting Peds, #/hr	3	0	2	2	0	3	1	0	3	3	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	40	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	76	76	76	94	94	94	98	98	98
Heavy Vehicles, %	2	2	2	0	0	0	2	2	2	1	1	1
Mvmt Flow	45	4	32	33	4	72	21	388	11	20	276	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	802	769	287	783	771	400	292	0	0	402	0	0
Stage 1	325	325	-	439	439	-	-	-	-	-	-	-
Stage 2	477	444	-	344	332	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.5	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	302	332	752	314	333	654	1270	-	-	1162	-	-
Stage 1	687	649	-	601	582	-	-	-	-	-	-	-
Stage 2	569	575	-	676	648	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	258	319	750	289	320	650	1269	-	-	1159	-	-
Mov Cap-2 Maneuver	258	319	-	289	320	-	-	-	-	-	-	-
Stage 1	675	637	-	590	570	-	-	-	-	-	-	-
Stage 2	492	564	-	631	636	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17	13.9	0.4	0.5
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1269	-	-	258	655	289	617	1159	-	-
HCM Lane V/C Ratio	0.017	-	-	0.174	0.055	0.114	0.124	0.018	-	-
HCM Control Delay (s)	7.9	-	-	21.9	10.8	19.1	11.7	8.2	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.2	0.4	0.4	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	15	10	5	20	25	5	45	2	20	60	30
Future Vol, veh/h	20	15	10	5	20	25	5	45	2	20	60	30
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	5	5	5	7	7	7	0	0	0	2	2	2
Mvmt Flow	23	17	11	6	23	28	6	51	2	23	68	34
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	7.5	7.6	7.8
HCM LOS	A	A	A	A





























Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	44%	10%	18%
Vol Thru, %	87%	33%	40%	55%
Vol Right, %	4%	22%	50%	27%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	52	45	50	110
LT Vol	5	20	5	20
Through Vol	45	15	20	60
RT Vol	2	10	25	30
Lane Flow Rate	59	51	57	125
Geometry Grp	1	1	1	1
Degree of Util (X)	0.069	0.063	0.066	0.14
Departure Headway (Hd)	4.18	4.405	4.198	4.04
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	844	818	858	876
Service Time	2.271	2.405	2.2	2.118
HCM Lane V/C Ratio	0.07	0.062	0.066	0.143
HCM Control Delay	7.6	7.7	7.5	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.2	0.2	0.5

***Intersection Capacity Worksheets:
2025 Background
+ Project***

Timings
05/17/2022

1: Potomac Street & Mississippi Avenue

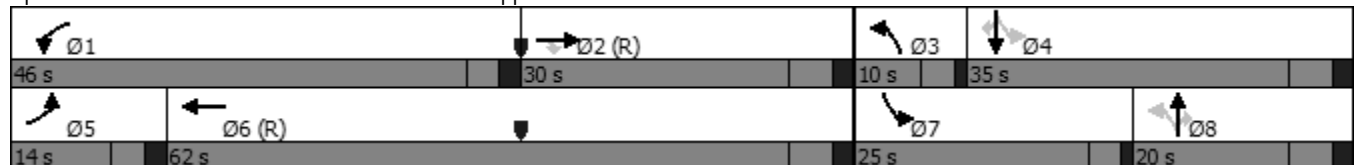
2025 Bkgrd + Project - AM Peak Hour












											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  			 			
Traffic Volume (vph)	29	1177	132	823	1724	160	108	74	160	108	74
Future Volume (vph)	29	1177	132	823	1724	160	108	74	160	108	74
Turn Type	Prot	NA	Perm	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6	3	8		7	4	
Permitted Phases			2			8		8	4		4
Detector Phase	5	2	2	1	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	3.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)	9.5	29.0	29.0	9.5	24.0	9.5	38.0	38.0	9.5	34.0	34.0
Total Split (s)	14.0	30.0	30.0	46.0	62.0	10.0	20.0	20.0	25.0	35.0	35.0
Total Split (%)	11.6%	24.8%	24.8%	38.0%	51.2%	8.3%	16.5%	16.5%	20.7%	28.9%	28.9%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None
Act Effect Green (s)	6.4	38.0	38.0	35.1	70.5	20.0	12.0	12.0	32.7	20.9	20.9
Actuated g/C Ratio	0.05	0.31	0.31	0.29	0.58	0.17	0.10	0.10	0.27	0.17	0.17
v/c Ratio	0.38	0.88	0.25	0.89	0.66	0.81	0.70	0.20	0.52	0.36	0.20

Intersection Summary

Cycle Length: 121
 Actuated Cycle Length: 121
 Offset: 95 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Green
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 36.9
 Intersection Capacity Utilization 77.0%
 Analysis Period (min) 15

Splits and Phases: 1: Potomac Street & Mississippi Avenue



											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	35	1401	157	876	1917	193	130	89	172	116	80
v/c Ratio	0.38	0.88	0.25	0.89	0.66	0.81	0.70	0.20	0.52	0.36	0.20
Control Delay	65.9	48.0	4.1	52.5	20.8	67.9	72.0	1.0	39.9	45.3	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.9	48.0	4.1	52.5	20.8	67.9	72.0	1.0	39.9	45.3	1.1
Queue Length 50th (ft)	27	384	0	335	385	122	99	0	108	80	0
Queue Length 95th (ft)	57	#568	24	390	532	#162	150	0	157	128	0
Internal Link Dist (ft)		1218			819		404			347	
Turn Bay Length (ft)	135		430	400		160		200	50		50
Base Capacity (vph)	131	1596	617	1152	2916	237	221	492	384	450	494
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.88	0.25	0.76	0.66	0.81	0.59	0.18	0.45	0.26	0.16

























Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

1: Potomac Street & Mississippi Avenue

2025 Bkgrd + Project - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1177	132	823	1724	78	160	108	74	160	108	74
Future Volume (veh/h)	29	1177	132	823	1724	78	160	108	74	160	108	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	35	1401	0	876	1834	83	193	130	0	172	116	80
Peak Hour Factor	0.84	0.84	0.84	0.94	0.94	0.94	0.83	0.83	0.83	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	44	1854		938	3038	137	248	166		268	264	222
Arrive On Green	0.02	0.36	0.00	0.27	0.61	0.61	0.05	0.09	0.00	0.10	0.14	0.14
Sat Flow, veh/h	1781	5106	1585	3428	4966	224	1795	1885	2812	1795	1885	1587
Grp Volume(v), veh/h	35	1401	0	876	1246	671	193	130	0	172	116	80
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1714	1689	1814	1795	1885	1406	1795	1885	1587
Q Serve(g_s), s	2.4	29.1	0.0	30.2	27.5	27.6	6.0	8.2	0.0	10.2	6.8	5.5
Cycle Q Clear(g_c), s	2.4	29.1	0.0	30.2	27.5	27.6	6.0	8.2	0.0	10.2	6.8	5.5
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	44	1854		938	2066	1110	248	166		268	264	222
V/C Ratio(X)	0.79	0.76		0.93	0.60	0.60	0.78	0.78		0.64	0.44	0.36
Avail Cap(c_a), veh/h	132	1854		1162	2066	1110	248	218		397	452	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	33.8	0.0	42.9	14.4	14.5	51.6	54.0	0.0	42.7	47.7	47.1
Incr Delay (d2), s/veh	10.7	2.9	0.0	10.8	1.3	2.4	13.3	9.2	0.0	1.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	12.1	0.0	13.8	9.9	11.1	3.8	4.3	0.0	4.6	3.3	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.4	36.7	0.0	53.7	15.8	16.9	64.9	63.2	0.0	43.6	48.1	47.5
LnGrp LOS	E	D		D	B	B	E	E		D	D	D
Approach Vol, veh/h	1436				2793				323			
Approach Delay, s/veh	37.5				27.9				64.2			
Approach LOS	D				C				E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	38.1	49.9	10.0	23.0	8.0	80.0	16.3	16.7				
Change Period (Y+Rc), s	5.0	6.0	4.0	6.0	5.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	41.0	24.0	6.0	29.0	9.0	56.0	21.0	14.0				
Max Q Clear Time (g_c+I1), s	32.2	31.1	8.0	8.8	4.4	29.6	12.2	10.2				
Green Ext Time (p_c), s	1.0	0.0	0.0	0.5	0.0	15.7	0.2	0.1				

Intersection Summary

HCM 6th Ctrl Delay	34.5
HCM 6th LOS	C

Notes















User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
05/17/2022

2: Potomac Street & Louisiana Avenue





2025 Bkgrd + Project - AM Peak Hour







								
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Configurations								
Traffic Volume (vph)	98	0	31	3	1	15	341	809
Future Volume (vph)	98	0	31	3	1	15	341	809
Turn Type	Perm	NA	Perm	Perm	NA	Perm	NA	NA
Protected Phases		4			8		2	6
Permitted Phases	4		4	8		2		
Detector Phase	4	4	4	8	8	2	2	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	23.0	23.0	23.0	24.0	24.0	18.0	18.0	22.0
Total Split (s)	33.0	33.0	33.0	21.0	21.0	78.0	78.0	78.0
Total Split (%)	25.0%	25.0%	25.0%	15.9%	15.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	6.0	6.0	6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)		14.7	14.7		6.2	101.4	101.4	101.4
Actuated g/C Ratio		0.11	0.11		0.05	0.77	0.77	0.77
v/c Ratio		0.70	0.14		0.14	0.07	0.26	0.73

Intersection Summary

Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 38 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 18.8
 Intersection Capacity Utilization 70.4%
 Analysis Period (min) 15

Splits and Phases: 2: Potomac Street & Louisiana Avenue




















 Ø2 (R)	 Ø4	 Ø8
78 s	33 s	21 s
 Ø6 (R)		
78 s		





						
Lane Group	EBT	EBR	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	105	33	12	17	379	1031
v/c Ratio	0.70	0.14	0.14	0.07	0.26	0.73
Control Delay	79.7	2.7	63.0	7.3	6.4	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	2.6
Total Delay	79.7	2.7	63.0	7.3	6.4	17.4
Queue Length 50th (ft)	88	0	10	2	65	321
Queue Length 95th (ft)	145	6	12	15	182	789
Internal Link Dist (ft)	715		260		100	235
Turn Bay Length (ft)				40		
Base Capacity (vph)	285	375	230	254	1444	1409
Starvation Cap Reductn	0	0	0	0	0	255
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.09	0.05	0.07	0.26	0.89
Intersection Summary						

HCM 6th Signalized Intersection Summary

2: Potomac Street & Louisiana Avenue

2025 Bkgrd + Project - AM Peak Hour









												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	0	31	3	1	0	15	341	0	0	809	77
Future Volume (veh/h)	98	0	31	3	1	0	15	341	0	0	809	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1900	1900	1900	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	105	0	33	9	3	0	17	379	0	0	941	90
Peak Hour Factor	0.93	0.93	0.93	0.33	0.33	0.33	0.90	0.90	0.90	0.86	0.86	0.86
Percent Heavy Veh, %	6	6	6	0	0	0	1	1	1	2	2	2
Cap, veh/h	189	0	147	74	18	0	379	1543	0	55	1375	132
Arrive On Green	0.10	0.00	0.10	0.10	0.10	0.00	0.82	0.82	0.00	0.00	0.82	0.82
Sat Flow, veh/h	1373	0	1504	268	187	0	551	1885	0	1004	1680	161
Grp Volume(v), veh/h	105	0	33	12	0	0	17	379	0	0	0	1031
Grp Sat Flow(s),veh/h/ln	1373	0	1504	455	0	0	551	1885	0	1004	0	1841
Q Serve(g_s), s	0.0	0.0	2.7	0.2	0.0	0.0	1.7	6.0	0.0	0.0	0.0	30.5
Cycle Q Clear(g_c), s	9.8	0.0	2.7	10.0	0.0	0.0	32.2	6.0	0.0	0.0	0.0	30.5
Prop In Lane	1.00		1.00	0.75		0.00	1.00		0.00	1.00		0.09
Lane Grp Cap(c), veh/h	189	0	147	92	0	0	379	1543	0	55	0	1507
V/C Ratio(X)	0.56	0.00	0.22	0.13	0.00	0.00	0.04	0.25	0.00	0.00	0.00	0.68
Avail Cap(c_a), veh/h	344	0	319	127	0	0	379	1543	0	55	0	1507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	58.1	0.0	54.9	55.3	0.0	0.0	11.6	2.7	0.0	0.0	0.0	4.9
Incr Delay (d2), s/veh	0.9	0.0	0.3	0.5	0.0	0.0	0.2	0.4	0.0	0.0	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	1.0	0.4	0.0	0.0	0.2	2.0	0.0	0.0	0.0	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.1	0.0	55.2	55.8	0.0	0.0	11.8	3.1	0.0	0.0	0.0	7.5
LnGrp LOS	E	A	E	E	A	A	B	A	A	A	A	A
Approach Vol, veh/h	138			12			396			1031		
Approach Delay, s/veh	58.1			55.8			3.5			7.5		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	114.1			17.9			114.1			17.9		
Change Period (Y+Rc), s	6.0			5.0			6.0			5.0		
Max Green Setting (Gmax), s	72.0			28.0			72.0			16.0		
Max Q Clear Time (g_c+I1), s	34.2			11.8			32.5			12.0		
Green Ext Time (p_c), s	5.5			0.4			22.2			0.0		
Intersection Summary												
HCM 6th Ctrl Delay			11.3									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	26	330	37	60	784
Future Vol, veh/h	17	26	330	37	60	784
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	30	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	91	91	89	89
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	19	29	363	41	67	881

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1402	387	0	0	407
Stage 1	387	-	-	-	-
Stage 2	1015	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.12
Critical Hdwy Stg 1	5.41	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.218
Pot Cap-1 Maneuver	155	663	-	-	1152
Stage 1	688	-	-	-	-
Stage 2	352	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	146	661	-	-	1149
Mov Cap-2 Maneuver	260	-	-	-	-
Stage 1	686	-	-	-	-
Stage 2	332	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.9	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	411	1149
HCM Lane V/C Ratio	-	-	0.116	0.059
HCM Control Delay (s)	-	-	14.9	8.3
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.4	0.2

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	2	10	8	1	10	31	278	43	89	354	10
Future Vol, veh/h	14	2	10	8	1	10	31	278	43	89	354	10
Conflicting Peds, #/hr	11	0	3	3	0	11	0	0	7	7	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	40	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	68	80	68	88	88	88	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	2	2	2
Mvmt Flow	22	3	15	12	1	15	35	316	49	99	393	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1027	1039	402	1027	1020	359	404	0	0	372	0	0
Stage 1	597	597	-	418	418	-	-	-	-	-	-	-
Stage 2	430	442	-	609	602	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	215	232	653	215	239	690	1160	-	-	1186	-	-
Stage 1	493	495	-	616	594	-	-	-	-	-	-	-
Stage 2	607	580	-	486	492	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	189	205	651	188	211	678	1160	-	-	1178	-	-
Mov Cap-2 Maneuver	189	205	-	188	211	-	-	-	-	-	-	-
Stage 1	478	453	-	593	572	-	-	-	-	-	-	-
Stage 2	569	559	-	430	451	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	20.2		17.3		0.7		1.6	
HCM LOS	C		C					























Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1160	-	-	189	478	188	578	1178	-	-
HCM Lane V/C Ratio	0.03	-	-	0.114	0.039	0.063	0.028	0.084	-	-
HCM Control Delay (s)	8.2	-	-	26.5	12.8	25.4	11.4	8.3	-	-
HCM Lane LOS	A	-	-	D	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0.2	0.1	0.3	-	-

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	26	5	2	21	29	7	66	3	20	16	20
Future Vol, veh/h	40	26	5	2	21	29	7	66	3	20	16	20
Peak Hour Factor	0.77	0.77	0.77	0.93	0.93	0.93	0.71	0.71	0.71	0.62	0.62	0.62
Heavy Vehicles, %	6	6	6	8	8	8	0	0	0	10	10	10
Mvmt Flow	52	34	6	2	23	31	10	93	4	32	26	32
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.2	7.6	8	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	56%	4%	36%
Vol Thru, %	87%	37%	40%	29%
Vol Right, %	4%	7%	56%	36%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	76	71	52	56
LT Vol	7	40	2	20
Through Vol	66	26	21	16
RT Vol	3	5	29	20
Lane Flow Rate	107	92	56	90
Geometry Grp	1	1	1	1
Degree of Util (X)	0.129	0.117	0.066	0.11
Departure Headway (Hd)	4.337	4.581	4.263	4.387
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	830	785	843	820
Service Time	2.349	2.595	2.278	2.399
HCM Lane V/C Ratio	0.129	0.117	0.066	0.11
HCM Control Delay	8	8.2	7.6	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.4	0.2	0.4

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	39	1701	87	322	1572	131	98	599	205	155	97
Future Volume (vph)	39	1701	87	322	1572	131	98	599	205	155	97
Turn Type	Prot	NA	Perm	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6	3	8		7	4	5
Permitted Phases			2			8		8	4		4
Detector Phase	5	2	2	1	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	3.0	5.0	5.0	3.0	5.0	4.0
Minimum Split (s)	9.5	29.0	29.0	9.5	24.0	9.5	38.0	38.0	9.5	34.0	9.5
Total Split (s)	14.0	47.0	47.0	26.0	59.0	23.0	26.0	26.0	23.0	26.0	14.0
Total Split (%)	11.5%	38.5%	38.5%	21.3%	48.4%	18.9%	21.3%	21.3%	18.9%	21.3%	11.5%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	4.0	6.0	6.0	4.0	6.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None
Act Effect Green (s)	6.7	54.6	54.6	15.9	63.7	27.2	13.6	13.6	36.4	18.9	26.6
Actuated g/C Ratio	0.05	0.45	0.45	0.13	0.52	0.22	0.11	0.11	0.30	0.15	0.22
v/c Ratio	0.44	0.82	0.12	0.76	0.67	0.47	0.53	0.87	0.62	0.64	0.52

Intersection Summary

Cycle Length: 122

Actuated Cycle Length: 122

Offset: 45 (37%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87













Intersection Signal Delay: 32.4












Intersection Capacity Utilization 79.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Potomac Street & Mississippi Avenue

					
26 s	47 s		23 s	26 s	
					
14 s	59 s		23 s	26 s	

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	43	1869	96	339	1752	149	111	681	244	185	243
v/c Ratio	0.44	0.82	0.12	0.76	0.67	0.47	0.53	0.87	0.62	0.64	0.52
Control Delay	69.1	35.0	1.0	62.2	24.4	36.4	59.3	23.6	40.7	57.9	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.1	35.0	1.0	62.2	24.4	36.4	59.3	23.6	40.7	57.9	17.2
Queue Length 50th (ft)	33	471	0	134	365	88	84	61	154	137	54
Queue Length 95th (ft)	72	#698	7	178	491	128	133	124	194	192	0
Internal Link Dist (ft)		1218			819		404			347	
Turn Bay Length (ft)	135		430	400		160		200	50		50
Base Capacity (vph)	130	2273	770	590	2629	420	308	903	408	327	491
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.82	0.12	0.57	0.67	0.35	0.36	0.75	0.60	0.57	0.49
































Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

1: Potomac Street & Mississippi Avenue

2025 Bkgrd + Project - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  				 	 	 	
Traffic Volume (veh/h)	39	1701	87	322	1572	92	131	98	599	205	155	97
Future Volume (veh/h)	39	1701	87	322	1572	92	131	98	599	205	155	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	43	1869	0	339	1655	97	149	111	0	244	185	242
Peak Hour Factor	0.91	0.91	0.91	0.95	0.95	0.95	0.88	0.88	0.88	0.84	0.84	0.40
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	55	2361		397	2693	158	286	222		378	306	307
Arrive On Green	0.03	0.46	0.00	0.11	0.55	0.55	0.09	0.12	0.00	0.13	0.16	0.16
Sat Flow, veh/h	1781	5106	1585	3456	4930	289	1795	1885	2812	1795	1885	1586
Grp Volume(v), veh/h	43	1869	0	339	1142	610	149	111	0	244	185	242
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1815	1795	1885	1406	1795	1885	1586
Q Serve(g_s), s	2.9	37.9	0.0	11.7	28.0	28.0	8.8	6.7	0.0	14.1	11.1	17.7
Cycle Q Clear(g_c), s	2.9	37.9	0.0	11.7	28.0	28.0	8.8	6.7	0.0	14.1	11.1	17.7
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	55	2361		397	1860	991	286	222		378	306	307
V/C Ratio(X)	0.78	0.79		0.85	0.61	0.61	0.52	0.50		0.65	0.60	0.79
Avail Cap(c_a), veh/h	131	2361		595	1860	991	407	309		419	309	309
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	27.8	0.0	53.0	18.9	18.9	42.1	50.4	0.0	38.3	47.5	46.8
Incr Delay (d2), s/veh	8.5	2.8	0.0	5.1	1.5	2.9	0.5	0.6	0.0	2.0	2.3	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	15.2	0.0	5.3	10.7	11.8	3.9	3.2	0.0	6.5	5.5	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.2	30.6	0.0	58.1	20.4	21.8	42.6	51.1	0.0	40.3	49.8	58.5
LnGrp LOS	E	C		E	C	C	D	D		D	D	E
Approach Vol, veh/h		1912			2091			260			671	
Approach Delay, s/veh		31.4			26.9			46.2			49.5	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.0	62.4	14.8	25.8	8.8	72.7	20.2	20.4				
Change Period (Y+Rc), s	5.0	6.0	4.0	6.0	5.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	21.0	41.0	19.0	20.0	9.0	53.0	19.0	20.0				
Max Q Clear Time (g_c+I1), s	13.7	39.9	10.8	19.7	4.9	30.0	16.1	8.7				
Green Ext Time (p_c), s	0.3	1.0	0.1	0.0	0.0	13.0	0.1	0.2				

Intersection Summary

HCM 6th Ctrl Delay	32.8
HCM 6th LOS	C

Notes














User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
05/17/2022

2: Potomac Street & Louisiana Avenue





2025 Bkgrd + Project - PM Peak Hour







							
Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	98	0	13	0	23	740	350
Future Volume (vph)	98	0	13	0	23	740	350
Turn Type	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases		4		8		2	6
Permitted Phases	4		4		2		
Detector Phase	4	4	4	8	2	2	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	23.0	23.0	23.0	24.0	18.0	18.0	22.0
Total Split (s)	33.0	33.0	33.0	21.0	78.0	78.0	78.0
Total Split (%)	25.0%	25.0%	25.0%	15.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	6.0	6.0	6.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)		42.2	42.2	5.0	76.8	76.8	76.8
Actuated g/C Ratio		0.32	0.32	0.04	0.58	0.58	0.58
v/c Ratio		2.21	0.03	0.03	0.07	0.83	0.45

Intersection Summary

Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 38 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.21
 Intersection Signal Delay: 72.5
 Intersection Capacity Utilization 60.6%
 Analysis Period (min) 15

Splits and Phases: 2: Potomac Street & Louisiana Avenue




















 Ø2 (R)	 Ø4	 Ø8
78 s	33 s	21 s
 Ø6 (R)		
78 s		





						
Lane Group	EBT	EBR	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	124	16	8	28	894	466
v/c Ratio	2.21	0.03	0.03	0.07	0.83	0.45
Control Delay	623.7	0.1	0.0	11.2	29.4	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	623.7	0.1	0.0	11.2	29.4	16.0
Queue Length 50th (ft)	~164	0	0	11	626	221
Queue Length 95th (ft)	#276	0	0	20	585	252
Internal Link Dist (ft)	715		260		100	235
Turn Bay Length (ft)				40		
Base Capacity (vph)	56	535	397	428	1086	1050
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	2.21	0.03	0.02	0.07	0.82	0.44
Intersection Summary						
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.						
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.						

HCM 6th Signalized Intersection Summary

2: Potomac Street & Louisiana Avenue

2025 Bkgrd + Project - PM Peak Hour









												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	0	13	0	0	2	23	740	2	0	350	93
Future Volume (veh/h)	98	0	13	0	0	2	23	740	2	0	350	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	124	0	16	0	0	8	28	892	2	0	368	98
Peak Hour Factor	0.79	0.79	0.79	0.25	0.25	0.25	0.83	0.83	0.83	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	0	0	2	2	2	2	2	2
Cap, veh/h	204	0	175	0	0	179	737	1501	3	55	1144	305
Arrive On Green	0.11	0.00	0.11	0.00	0.00	0.11	0.80	0.80	0.80	0.00	0.80	0.80
Sat Flow, veh/h	1340	0	1564	0	0	1597	926	1865	4	622	1422	379
Grp Volume(v), veh/h	124	0	16	0	0	8	28	0	894	0	0	466
Grp Sat Flow(s),veh/h/ln	1340	0	1564	0	0	1597	926	0	1869	622	0	1800
Q Serve(g_s), s	11.5	0.0	1.2	0.0	0.0	0.6	1.1	0.0	23.6	0.0	0.0	9.0
Cycle Q Clear(g_c), s	12.1	0.0	1.2	0.0	0.0	0.6	10.1	0.0	23.6	0.0	0.0	9.0
Prop In Lane	1.00		1.00	0.00		1.00	1.00		0.00	1.00		0.21
Lane Grp Cap(c), veh/h	204	0	175	0	0	179	737	0	1505	55	0	1449
V/C Ratio(X)	0.61	0.00	0.09	0.00	0.00	0.04	0.04	0.00	0.59	0.00	0.00	0.32
Avail Cap(c_a), veh/h	344	0	332	0	0	194	737	0	1505	55	0	1449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	57.7	0.0	52.6	0.0	0.0	52.3	4.7	0.0	4.8	0.0	0.0	3.4
Incr Delay (d2), s/veh	1.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	1.7	0.0	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.5	0.0	0.0	0.2	0.2	0.0	8.1	0.0	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.8	0.0	52.7	0.0	0.0	52.4	4.8	0.0	6.5	0.0	0.0	4.0
LnGrp LOS	E	A	D	A	A	D	A	A	A	A	A	A
Approach Vol, veh/h	140			8			922			466		
Approach Delay, s/veh	58.1			52.4			6.5			4.0		
Approach LOS	E			D			A			A		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	112.2			19.8			112.2			19.8		
Change Period (Y+Rc), s	6.0			5.0			6.0			5.0		
Max Green Setting (Gmax), s	72.0			28.0			72.0			16.0		
Max Q Clear Time (g_c+I1), s	25.6			14.1			11.0			2.6		
Green Ext Time (p_c), s	19.2			0.4			7.3			0.0		
Intersection Summary												
HCM 6th Ctrl Delay	10.7											
HCM 6th LOS	B											

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	37	70	695	20	36	327
Future Vol, veh/h	37	70	695	20	36	327
Conflicting Peds, #/hr	1	1	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	30	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	82	82	89	89
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	41	78	848	24	40	367

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1319	872	0	0	883
Stage 1	871	-	-	-	-
Stage 2	448	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.13
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.227
Pot Cap-1 Maneuver	175	353	-	-	762
Stage 1	413	-	-	-	-
Stage 2	648	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	164	349	-	-	754
Mov Cap-2 Maneuver	294	-	-	-	-
Stage 1	409	-	-	-	-
Stage 2	613	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.1	0	1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	328	754
HCM Lane V/C Ratio	-	-	0.362	0.054
HCM Control Delay (s)	-	-	22.1	10
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	1.6	0.2

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	3	25	21	3	53	18	338	7	16	290	13
Future Vol, veh/h	35	3	25	21	3	53	18	338	7	16	290	13
Conflicting Peds, #/hr	3	0	2	2	0	3	1	0	3	3	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	40	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	76	76	76	94	94	94	98	98	98
Heavy Vehicles, %	2	2	2	0	0	0	2	2	2	1	1	1
Mvmt Flow	45	4	32	28	4	70	19	360	7	16	296	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	778	744	306	760	747	370	310	0	0	370	0	0
Stage 1	336	336	-	405	405	-	-	-	-	-	-	-
Stage 2	442	408	-	355	342	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.5	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	314	343	734	325	344	680	1250	-	-	1194	-	-
Stage 1	678	642	-	626	602	-	-	-	-	-	-	-
Stage 2	594	597	-	666	642	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	272	332	732	300	333	676	1249	-	-	1191	-	-
Mov Cap-2 Maneuver	272	332	-	300	333	-	-	-	-	-	-	-
Stage 1	667	633	-	615	591	-	-	-	-	-	-	-
Stage 2	520	586	-	623	633	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	16.4			13.2			0.4			0.4		
HCM LOS	C			B								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1249	-	-	272	648	300	641	1191	-	-
HCM Lane V/C Ratio	0.015	-	-	0.165	0.055	0.092	0.115	0.014	-	-
HCM Control Delay (s)	7.9	-	-	20.8	10.9	18.2	11.3	8.1	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.2	0.3	0.4	0	-	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	15	10	3	20	21	4	43	2	19	61	32
Future Vol, veh/h	19	15	10	3	20	21	4	43	2	19	61	32
Peak Hour Factor	0.65	0.65	0.65	0.58	0.58	0.58	0.87	0.87	0.87	0.81	0.81	0.81
Heavy Vehicles, %	5	5	5	7	7	7	0	0	0	2	2	2
Mvmt Flow	29	23	15	5	34	36	5	49	2	23	75	40
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0























Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	7.7	7.7	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	43%	7%	17%
Vol Thru, %	88%	34%	45%	54%
Vol Right, %	4%	23%	48%	29%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	49	44	44	112
LT Vol	4	19	3	19
Through Vol	43	15	20	61
RT Vol	2	10	21	32
Lane Flow Rate	56	68	76	138
Geometry Grp	1	1	1	1
Degree of Util (X)	0.068	0.084	0.09	0.161
Departure Headway (Hd)	4.359	4.447	4.252	4.194
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	823	808	845	860
Service Time	2.375	2.461	2.266	2.194
HCM Lane V/C Ratio	0.068	0.084	0.09	0.16
HCM Control Delay	7.7	7.9	7.7	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.3	0.6

***Intersection Capacity Worksheets:
2040 Background +
Project***

Timings
05/17/2022









1: Potomac Street & Mississippi Avenue
2040 Bkgrd + Project - AM Peak Hour












											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	30	1365	159	887	2000	78	77	351	175	115	80
Future Volume (vph)	30	1365	159	887	2000	78	77	351	175	115	80
Turn Type	Prot	NA	Perm	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6	3	8		7	4	
Permitted Phases			2			8		8	4		4
Detector Phase	5	2	2	1	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	3.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)	9.5	29.0	29.0	9.5	24.0	9.5	38.0	38.0	9.5	34.0	34.0
Total Split (s)	14.0	30.0	30.0	46.0	62.0	10.0	20.0	20.0	25.0	35.0	35.0
Total Split (%)	11.6%	24.8%	24.8%	38.0%	51.2%	8.3%	16.5%	16.5%	20.7%	28.9%	28.9%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None
Act Effect Green (s)	6.3	37.5	37.5	36.9	71.9	17.6	9.8	9.8	31.6	21.6	21.6
Actuated g/C Ratio	0.05	0.31	0.31	0.30	0.59	0.15	0.08	0.08	0.26	0.18	0.18
v/c Ratio	0.36	0.94	0.28	0.91	0.74	0.41	0.55	0.66	0.53	0.37	0.21

Intersection Summary

Cycle Length: 121
 Actuated Cycle Length: 121
 Offset: 95 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Green
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 36.4
 Intersection Capacity Utilization 82.4%
 Analysis Period (min) 15

Splits and Phases: 1: Potomac Street & Mississippi Avenue

			
Ø1	Ø2 (R)	Ø3	Ø4
46 s	30 s	10 s	35 s
			
Ø5	Ø6 (R)	Ø7	Ø8
14 s	62 s	25 s	20 s

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	33	1484	173	944	2213	85	84	382	188	124	86
v/c Ratio	0.36	0.94	0.28	0.91	0.74	0.41	0.55	0.66	0.53	0.37	0.21
Control Delay	65.5	54.4	5.7	53.5	22.4	40.4	66.5	11.1	41.0	46.0	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.5	54.4	5.7	53.5	22.4	40.4	66.5	11.1	41.0	46.0	1.2
Queue Length 50th (ft)	25	418	0	361	472	52	64	0	121	88	0
Queue Length 95th (ft)	59	#680	48	429	#721	85	114	49	171	135	0
Internal Link Dist (ft)		1218			819		404			347	
Turn Bay Length (ft)	135		430	400		160		200	50		50
Base Capacity (vph)	131	1574	611	1152	2972	212	217	658	394	450	494
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.94	0.28	0.82	0.74	0.40	0.39	0.58	0.48	0.28	0.17

Intersection Summary































95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

05/17/2022

1: Potomac Street & Mississippi Avenue

2040 Bkgrd + Project - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  				 		 	
Traffic Volume (veh/h)	30	1365	159	887	2000	80	78	77	351	175	115	80
Future Volume (veh/h)	30	1365	159	887	2000	80	78	77	351	175	115	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	33	1484	0	944	2128	85	85	84	0	188	124	86
Peak Hour Factor	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	42	1815		1004	3122	124	226	125		290	242	204
Arrive On Green	0.02	0.36	0.00	0.29	0.62	0.62	0.05	0.07	0.00	0.11	0.13	0.13
Sat Flow, veh/h	1781	5106	1585	3428	4997	199	1795	1885	2812	1795	1885	1586
Grp Volume(v), veh/h	33	1484	0	944	1436	777	85	84	0	188	124	86
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1714	1689	1819	1795	1885	1406	1795	1885	1586
Q Serve(g_s), s	2.2	32.0	0.0	32.5	33.6	33.9	5.3	5.3	0.0	11.4	7.4	6.0
Cycle Q Clear(g_c), s	2.2	32.0	0.0	32.5	33.6	33.9	5.3	5.3	0.0	11.4	7.4	6.0
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	42	1815		1004	2110	1136	226	125		290	242	204
V/C Ratio(X)	0.79	0.82		0.94	0.68	0.68	0.38	0.67		0.65	0.51	0.42
Avail Cap(c_a), veh/h	132	1815		1162	2110	1136	226	218		401	452	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	35.4	0.0	41.7	14.8	14.9	49.6	55.2	0.0	44.1	49.2	48.6
Incr Delay (d2), s/veh	11.5	4.2	0.0	12.6	1.8	3.3	0.4	2.3	0.0	0.9	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	13.5	0.0	15.1	12.1	13.6	2.4	2.6	0.0	5.2	3.6	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.3	39.7	0.0	54.3	16.6	18.2	50.0	57.5	0.0	45.0	49.8	49.1
LnGrp LOS	E	D		D	B	B	D	E		D	D	D
Approach Vol, veh/h		1517			3157			169			398	
Approach Delay, s/veh		40.3			28.3			53.8			47.4	
Approach LOS		D			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	40.4	49.0	10.0	21.6	7.8	81.6	17.5	14.0				
Change Period (Y+Rc), s	5.0	6.0	4.0	6.0	5.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	41.0	24.0	6.0	29.0	9.0	56.0	21.0	14.0				
Max Q Clear Time (g_c+I1), s	34.5	34.0	7.3	9.4	4.2	35.9	13.4	7.3				
Green Ext Time (p_c), s	0.9	0.0	0.0	0.6	0.0	15.0	0.2	0.1				















Intersection Summary

HCM 6th Ctrl Delay	34.0
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.





Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.







								
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Configurations								
Traffic Volume (vph)	105	0	34	5	1	14	366	866
Future Volume (vph)	105	0	34	5	1	14	366	866
Turn Type	Perm	NA	Perm	Perm	NA	Perm	NA	NA
Protected Phases		4			8		2	6
Permitted Phases	4		4	8		2		
Detector Phase	4	4	4	8	8	2	2	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	23.0	23.0	23.0	24.0	24.0	18.0	18.0	22.0
Total Split (s)	33.0	33.0	33.0	21.0	21.0	78.0	78.0	78.0
Total Split (%)	25.0%	25.0%	25.0%	15.9%	15.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	6.0	6.0	6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)		14.4	14.4		6.8	101.3	101.3	101.3
Actuated g/C Ratio		0.11	0.11		0.05	0.77	0.77	0.77
v/c Ratio		0.70	0.17		0.19	0.06	0.28	0.73

Intersection Summary

Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 38 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 19.2
 Intersection Capacity Utilization 73.9%
 Analysis Period (min) 15

Splits and Phases: 2: Potomac Street & Louisiana Avenue




















 Ø2 (R)	 Ø4	 Ø8
78 s	33 s	21 s
 Ø6 (R)		
78 s		





						
Lane Group	EBT	EBR	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	113	37	18	15	398	1033
v/c Ratio	0.70	0.17	0.19	0.06	0.28	0.73
Control Delay	77.9	4.6	63.5	7.4	6.5	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	2.7
Total Delay	77.9	4.6	63.5	7.4	6.5	17.6
Queue Length 50th (ft)	95	0	15	2	68	318
Queue Length 95th (ft)	154	10	15	14	194	904
Internal Link Dist (ft)	715		260		100	235
Turn Bay Length (ft)				40		
Base Capacity (vph)	316	375	230	252	1443	1408
Starvation Cap Reductn	0	0	0	0	0	254
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.10	0.08	0.06	0.28	0.90
Intersection Summary						









HCM 6th Signalized Intersection Summary

2: Potomac Street & Louisiana Avenue

2040 Bkgrd + Project - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	0	34	5	1	0	14	366	0	0	866	85
Future Volume (veh/h)	105	0	34	5	1	0	14	366	0	0	866	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1900	1900	1900	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	113	0	37	15	3	0	15	398	0	0	941	92
Peak Hour Factor	0.93	0.93	0.93	0.33	0.33	0.33	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	0	0	0	1	1	1	2	2	2
Cap, veh/h	202	0	150	82	12	0	375	1540	0	55	1369	134
Arrive On Green	0.10	0.00	0.10	0.10	0.10	0.00	0.82	0.82	0.00	0.00	0.82	0.82
Sat Flow, veh/h	1479	0	1504	322	122	0	550	1885	0	987	1676	164
Grp Volume(v), veh/h	113	0	37	18	0	0	15	398	0	0	0	1033
Grp Sat Flow(s),veh/h/ln	1479	0	1504	444	0	0	550	1885	0	987	0	1840
Q Serve(g_s), s	0.0	0.0	3.0	1.1	0.0	0.0	1.5	6.5	0.0	0.0	0.0	30.9
Cycle Q Clear(g_c), s	9.6	0.0	3.0	10.7	0.0	0.0	32.5	6.5	0.0	0.0	0.0	30.9
Prop In Lane	1.00		1.00	0.83		0.00	1.00		0.00	1.00		0.09
Lane Grp Cap(c), veh/h	202	0	150	94	0	0	375	1540	0	55	0	1503
V/C Ratio(X)	0.56	0.00	0.25	0.19	0.00	0.00	0.04	0.26	0.00	0.00	0.00	0.69
Avail Cap(c_a), veh/h	355	0	319	125	0	0	375	1540	0	55	0	1503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	57.8	0.0	54.8	59.9	0.0	0.0	11.8	2.8	0.0	0.0	0.0	5.0
Incr Delay (d2), s/veh	0.9	0.0	0.3	0.7	0.0	0.0	0.2	0.4	0.0	0.0	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	1.2	0.6	0.0	0.0	0.2	2.1	0.0	0.0	0.0	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.7	0.0	55.2	60.6	0.0	0.0	12.0	3.2	0.0	0.0	0.0	7.6
LnGrp LOS	E	A	E	E	A	A	B	A	A	A	A	A
Approach Vol, veh/h	150			18			413			1033		
Approach Delay, s/veh	57.8			60.6			3.5			7.6		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	113.8			18.2			113.8			18.2		
Change Period (Y+Rc), s	6.0			5.0			6.0			5.0		
Max Green Setting (Gmax), s	72.0			28.0			72.0			16.0		
Max Q Clear Time (g_c+I1), s	34.5			11.6			32.9			12.7		
Green Ext Time (p_c), s	5.8			0.4			22.1			0.0		
Intersection Summary												
HCM 6th Ctrl Delay	11.8											
HCM 6th LOS	B											

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	26	355	38	60	845
Future Vol, veh/h	18	26	355	38	60	845
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	30	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	92	92	92	92
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	20	29	386	41	65	918
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1458	410	0	0	430	0
Stage 1	410	-	-	-	-	-
Stage 2	1048	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.12	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	143	644	-	-	1129	-
Stage 1	672	-	-	-	-	-
Stage 2	339	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	134	642	-	-	1126	-
Mov Cap-2 Maneuver	248	-	-	-	-	-
Stage 1	670	-	-	-	-	-
Stage 2	319	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	15.6	0		0.6		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	389	1126	-	
HCM Lane V/C Ratio	-	-	0.126	0.058	-	
HCM Control Delay (s)	-	-	15.6	8.4	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.4	0.2	-	

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	2	10	10	1	10	35	265	45	95	383	10
Future Vol, veh/h	15	2	10	10	1	10	35	265	45	95	383	10
Conflicting Peds, #/hr	11	0	3	3	0	11	0	0	7	7	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	40	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	68	80	68	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	2	2	2
Mvmt Flow	23	3	15	15	1	15	38	288	49	103	416	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1036	1048	425	1036	1029	331	427	0	0	344	0	0
Stage 1	628	628	-	396	396	-	-	-	-	-	-	-
Stage 2	408	420	-	640	633	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	212	230	634	212	236	715	1138	-	-	1215	-	-
Stage 1	474	479	-	633	607	-	-	-	-	-	-	-
Stage 2	624	593	-	467	476	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	186	202	632	185	207	703	1138	-	-	1207	-	-
Mov Cap-2 Maneuver	186	202	-	185	207	-	-	-	-	-	-	-
Stage 1	458	438	-	608	583	-	-	-	-	-	-	-
Stage 2	583	569	-	413	436	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.8	18.3	0.8	1.6
HCM LOS	C	C		























Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1138	-	-	186	466	185	592	1207	-	-
HCM Lane V/C Ratio	0.033	-	-	0.124	0.04	0.079	0.027	0.086	-	-
HCM Control Delay (s)	8.3	-	-	27.1	13	26.1	11.2	8.3	-	-
HCM Lane LOS	A	-	-	D	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0.3	0.1	0.3	-	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	30	5	2	25	30	10	69	5	20	17	22
Future Vol, veh/h	40	30	5	2	25	30	10	69	5	20	17	22
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	6	6	6	8	8	8	0	0	0	10	10	10
Mvmt Flow	45	34	6	2	27	32	11	78	6	23	19	25
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	7.5	7.9	7.7
HCM LOS	A	A	A	A













Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	53%	4%	34%
Vol Thru, %	82%	40%	44%	29%
Vol Right, %	6%	7%	53%	37%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	84	75	57	59
LT Vol	10	40	2	20
Through Vol	69	30	25	17
RT Vol	5	5	30	22
Lane Flow Rate	95	85	61	67
Geometry Grp	1	1	1	1
Degree of Util (X)	0.114	0.107	0.071	0.081
Departure Headway (Hd)	4.306	4.499	4.189	4.35
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	837	799	858	826
Service Time	2.306	2.511	2.201	2.362
HCM Lane V/C Ratio	0.114	0.106	0.071	0.081
HCM Control Delay	7.9	8.1	7.5	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.4	0.2	0.3












											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	40	1975	91	346	1825	141	105	643	220	168	105
Future Volume (vph)	40	1975	91	346	1825	141	105	643	220	168	105
Turn Type	Prot	NA	Perm	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6	3	8		7	4	5
Permitted Phases			2			8		8	4		4
Detector Phase	5	2	2	1	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	3.0	5.0	5.0	3.0	5.0	4.0
Minimum Split (s)	9.5	29.0	29.0	9.5	24.0	9.5	38.0	38.0	9.5	34.0	9.5
Total Split (s)	14.0	47.0	47.0	26.0	59.0	23.0	26.0	26.0	23.0	26.0	14.0
Total Split (%)	11.5%	38.5%	38.5%	21.3%	48.4%	18.9%	21.3%	21.3%	18.9%	21.3%	11.5%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	4.0	6.0	6.0	4.0	6.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None
Act Effect Green (s)	6.7	53.6	53.6	16.7	63.6	27.7	13.9	13.9	36.5	18.8	26.6
Actuated g/C Ratio	0.05	0.44	0.44	0.14	0.52	0.23	0.11	0.11	0.30	0.15	0.22
v/c Ratio	0.44	0.96	0.13	0.78	0.77	0.48	0.54	0.88	0.61	0.63	0.27

Intersection Summary

Cycle Length: 122
 Actuated Cycle Length: 122
 Offset: 45 (37%), Referenced to phase 2:EBT and 6:WBT, Start of Green
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.96
 Intersection Signal Delay: 37.5
 Intersection Capacity Utilization 86.9%
 Analysis Period (min) 15

Splits and Phases: 1: Potomac Street & Mississippi Avenue

					
Ø1	Ø2 (R)		Ø3	Ø4	
26 s	47 s		23 s	26 s	
					
Ø5	Ø6 (R)		Ø7	Ø8	
14 s	59 s		23 s	26 s	

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	43	2147	99	364	2026	153	114	699	239	183	114
v/c Ratio	0.44	0.96	0.13	0.78	0.77	0.48	0.54	0.88	0.61	0.63	0.27
Control Delay	69.1	46.2	1.2	62.3	27.5	36.4	59.0	25.4	40.2	57.6	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.1	46.2	1.2	62.3	27.5	36.4	59.0	25.4	40.2	57.6	8.2
Queue Length 50th (ft)	33	602	0	144	462	91	86	68	150	135	4
Queue Length 95th (ft)	72	#871	9	190	616	135	139	146	206	207	46
Internal Link Dist (ft)		1218			819		404			347	
Turn Bay Length (ft)	135		430	400		160		200	50		50
Base Capacity (vph)	130	2234	759	590	2624	421	308	905	408	329	455
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.96	0.13	0.62	0.77	0.36	0.37	0.77	0.59	0.56	0.25

Intersection Summary

























95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

05/17/2022

1: Potomac Street & Mississippi Avenue

2040 Bkgrd + Project - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1975	91	346	1825	100	141	105	643	220	168	105
Future Volume (veh/h)	40	1975	91	346	1825	100	141	105	643	220	168	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	43	2147	0	364	1921	105	153	114	0	239	183	114
Peak Hour Factor	0.92	0.92	0.92	0.95	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	55	2469		422	2845	155	265	166		338	244	255
Arrive On Green	0.03	0.48	0.00	0.12	0.57	0.57	0.09	0.09	0.00	0.13	0.13	0.13
Sat Flow, veh/h	1781	5106	1585	3456	4953	270	1795	1885	2812	1795	1885	1583
Grp Volume(v), veh/h	43	2147	0	364	1319	707	153	114	0	239	183	114
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1818	1795	1885	1406	1795	1885	1583
Q Serve(g_s), s	2.9	45.7	0.0	12.6	32.8	33.0	9.3	7.2	0.0	14.3	11.4	7.9
Cycle Q Clear(g_c), s	2.9	45.7	0.0	12.6	32.8	33.0	9.3	7.2	0.0	14.3	11.4	7.9
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	55	2469		422	1956	1045	265	166		338	244	255
V/C Ratio(X)	0.78	0.87		0.86	0.67	0.68	0.58	0.69		0.71	0.75	0.45
Avail Cap(c_a), veh/h	131	2469		595	1956	1045	378	309		376	309	309
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	28.1	0.0	52.6	18.0	18.1	44.9	54.0	0.0	41.2	51.2	46.3
Incr Delay (d2), s/veh	8.5	4.5	0.0	6.9	1.9	3.5	0.7	1.9	0.0	4.1	5.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	18.5	0.0	5.8	12.4	13.9	4.2	3.5	0.0	6.8	5.8	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.2	32.6	0.0	59.5	19.9	21.6	45.7	55.8	0.0	45.3	56.4	46.8
LnGrp LOS	E	C		E	B	C	D	E		D	E	D
Approach Vol, veh/h	2190			2390			267			536		
Approach Delay, s/veh	33.3			26.4			50.0			49.4		
Approach LOS	C			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.9	65.0	15.3	21.8	8.8	76.1	20.4	16.8				
Change Period (Y+Rc), s	5.0	6.0	4.0	6.0	5.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	21.0	41.0	19.0	20.0	9.0	53.0	19.0	20.0				
Max Q Clear Time (g_c+I1), s	14.6	47.7	11.3	13.4	4.9	35.0	16.3	9.2				
Green Ext Time (p_c), s	0.3	0.0	0.1	0.5	0.0	12.7	0.1	0.2				

Intersection Summary

HCM 6th Ctrl Delay	32.7
HCM 6th LOS	C

Notes














User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
05/17/2022

2: Potomac Street & Louisiana Avenue





2040 Bkgrd + Project - PM Peak Hour

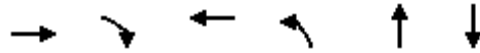
							
Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	105	0	16	0	26	794	375
Future Volume (vph)	105	0	16	0	26	794	375
Turn Type	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases		4		8		2	6
Permitted Phases	4		4		2		
Detector Phase	4	4	4	8	2	2	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	23.0	23.0	23.0	24.0	18.0	18.0	22.0
Total Split (s)	33.0	33.0	33.0	21.0	78.0	78.0	78.0
Total Split (%)	25.0%	25.0%	25.0%	15.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	6.0	6.0	6.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)		43.5	43.5	5.0	75.5	75.5	75.5
Actuated g/C Ratio		0.33	0.33	0.04	0.57	0.57	0.57
v/c Ratio		2.04	0.03	0.03	0.07	0.81	0.49

Intersection Summary

Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 38 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.04
 Intersection Signal Delay: 63.3
 Intersection Capacity Utilization 63.8%
 Analysis Period (min) 15

Splits and Phases: 2: Potomac Street & Louisiana Avenue

 Ø2 (R)	 Ø4	 Ø8
78 s	33 s	21 s
 Ø6 (R)		
78 s		



Lane Group	EBT	EBR	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	114	17	8	28	865	500
v/c Ratio	2.04	0.03	0.03	0.07	0.81	0.49
Control Delay	548.0	0.1	0.0	11.9	29.4	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	548.0	0.1	0.0	11.9	29.4	17.5
Queue Length 50th (ft)	~149	0	0	11	584	242
Queue Length 95th (ft)	#272	0	0	22	654	277
Internal Link Dist (ft)	715		260		100	235
Turn Bay Length (ft)				40		
Base Capacity (vph)	56	550	411	388	1071	1036
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	2.04	0.03	0.02	0.07	0.81	0.48

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.




















95th percentile volume exceeds capacity, queue may be longer.





Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

2: Potomac Street & Louisiana Avenue

2040 Bkgrd + Project - PM Peak Hour









												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	0	16	0	0	2	26	794	2	0	375	100
Future Volume (veh/h)	105	0	16	0	0	2	26	794	2	0	375	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1900	1900	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	114	0	17	0	0	8	28	863	2	0	395	105
Peak Hour Factor	0.92	0.92	0.92	0.25	0.25	0.25	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	0	0	2	2	2	2	2	2
Cap, veh/h	195	0	164	0	0	168	718	1513	4	55	1154	307
Arrive On Green	0.11	0.00	0.11	0.00	0.00	0.11	0.81	0.81	0.81	0.00	0.81	0.81
Sat Flow, veh/h	1336	0	1562	0	0	1596	897	1865	4	640	1422	378
Grp Volume(v), veh/h	114	0	17	0	0	8	28	0	865	0	0	500
Grp Sat Flow(s),veh/h/ln	1336	0	1562	0	0	1596	897	0	1869	640	0	1800
Q Serve(g_s), s	10.6	0.0	1.3	0.0	0.0	0.6	1.1	0.0	21.4	0.0	0.0	9.6
Cycle Q Clear(g_c), s	11.2	0.0	1.3	0.0	0.0	0.6	10.7	0.0	21.4	0.0	0.0	9.6
Prop In Lane	1.00		1.00	0.00		1.00	1.00		0.00	1.00		0.21
Lane Grp Cap(c), veh/h	195	0	164	0	0	168	718	0	1517	55	0	1461
V/C Ratio(X)	0.58	0.00	0.10	0.00	0.00	0.05	0.04	0.00	0.57	0.00	0.00	0.34
Avail Cap(c_a), veh/h	344	0	331	0	0	194	718	0	1517	55	0	1461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	58.1	0.0	53.4	0.0	0.0	53.1	4.6	0.0	4.4	0.0	0.0	3.3
Incr Delay (d2), s/veh	1.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	1.6	0.0	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.5	0.0	0.0	0.2	0.2	0.0	7.1	0.0	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.2	0.0	53.5	0.0	0.0	53.2	4.7	0.0	5.9	0.0	0.0	3.9
LnGrp LOS	E	A	D	A	A	D	A	A	A	A	A	A
Approach Vol, veh/h		131			8			893			500	
Approach Delay, s/veh		58.4			53.2			5.9			3.9	
Approach LOS		E			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		113.1		18.9		113.1		18.9				
Change Period (Y+Rc), s		6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s		72.0		28.0		72.0		16.0				
Max Q Clear Time (g_c+I1), s		23.4		13.2		11.6		2.6				
Green Ext Time (p_c), s		18.5		0.3		8.1		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			10.0									
HCM 6th LOS			A									
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection						
Int Delay, s/veh	2.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	37	70	750	20	36	350
Future Vol, veh/h	37	70	750	20	36	350
Conflicting Peds, #/hr	1	1	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	30	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	92	92	92	92
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	41	78	815	22	39	380

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1296	838	0	0	848
Stage 1	837	-	-	-	-
Stage 2	459	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.13
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.227
Pot Cap-1 Maneuver	181	369	-	-	785
Stage 1	428	-	-	-	-
Stage 2	641	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	170	365	-	-	777
Mov Cap-2 Maneuver	302	-	-	-	-
Stage 1	424	-	-	-	-
Stage 2	608	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.2	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	340	777
HCM Lane V/C Ratio	-	-	0.35	0.05
HCM Control Delay (s)	-	-	21.2	9.9
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.5	0.2

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	3	25	25	3	55	20	385	10	20	307	15
Future Vol, veh/h	35	3	25	25	3	55	20	385	10	20	307	15
Conflicting Peds, #/hr	3	0	2	2	0	3	1	0	3	3	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	40	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	76	76	76	94	94	94	98	98	98
Heavy Vehicles, %	2	2	2	0	0	0	2	2	2	1	1	1
Mvmt Flow	45	4	32	33	4	72	21	410	11	20	313	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	861	828	324	842	830	422	329	0	0	424	0	0
Stage 1	362	362	-	461	461	-	-	-	-	-	-	-
Stage 2	499	466	-	381	369	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.5	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	276	306	717	286	308	636	1231	-	-	1141	-	-
Stage 1	657	625	-	584	569	-	-	-	-	-	-	-
Stage 2	554	562	-	645	624	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	235	294	715	262	296	632	1230	-	-	1138	-	-
Mov Cap-2 Maneuver	235	294	-	262	296	-	-	-	-	-	-	-
Stage 1	645	613	-	572	558	-	-	-	-	-	-	-
Stage 2	477	551	-	600	612	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	18.3		14.6		0.4		0.5	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1230	-	-	235	620	262	597	1138	-	-
HCM Lane V/C Ratio	0.017	-	-	0.191	0.058	0.126	0.128	0.018	-	-
HCM Control Delay (s)	8	-	-	23.9	11.2	20.7	11.9	8.2	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0.2	0.4	0.4	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	23	15	10	5	20	25	5	48	2	20	66	35
Future Vol, veh/h	23	15	10	5	20	25	5	48	2	20	66	35
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	5	5	5	7	7	7	0	0	0	2	2	2
Mvmt Flow	26	17	11	6	23	28	6	55	2	23	75	40
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	7.5	7.6	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	48%	10%	17%
Vol Thru, %	87%	31%	40%	55%
Vol Right, %	4%	21%	50%	29%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	55	48	50	121
LT Vol	5	23	5	20
Through Vol	48	15	20	66
RT Vol	2	10	25	35
Lane Flow Rate	62	55	57	138
Geometry Grp	1	1	1	1
Degree of Util (X)	0.073	0.067	0.067	0.154
Departure Headway (Hd)	4.196	4.454	4.238	4.035
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	839	809	850	876
Service Time	2.294	2.456	2.239	2.118
HCM Lane V/C Ratio	0.074	0.068	0.067	0.158
HCM Control Delay	7.6	7.8	7.5	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.2	0.2	0.5